Report: Learning analytics offer advantages and challenges

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A recent report from the Alliance for Excellent Education presents examples of data-driven decision-making toward student improvement and offers capacity-building recommendations for SEAs, LEAs, and schools. "Using data effectively to meet the needs of all students augments the potential for educational equity" toward increased graduation rates, wrote the authors of *Capacity Enablers and Barriers for Learning Analytics: Implications for Policy and Practice*.

Increasing access to online educational content and assessments bring "the potential seamlessness and agility of connecting assessment data, other pertinent information about student learning styles, interests, and effective instructional strategies, and specific digital content, activities, and learning paths," the report said.

Moreover, beyond having students simply consume education content or enter assessment results, technology gives educators "the opportunity to create applications that directly influence educational practice."

However, "Many states, districts, and schools that have been making sincere efforts to use data are recognizing that the increased efforts around longitudinal data systems, the collection of more data digitally, and online assessment systems may not be informing instruction on a regular basis," the report said. "These systems provide more data and expanded access to information, but this has not necessarily been able to inform instructional decisions to help ensure equity for individual students."

In a statement releasing the report, Bob Wise, Alliance for Excellent Education president and former West Virginia governor, said, "Success depends on confronting fast-growing issues of how data is collected while maintaining student privacy and addressing concerns from parents and the public."

Issues such as funding, system interoperability, acceptable-use and responsible-use policies, student seat time and place requirements, and educator professional development opportunities and learning communities are among those driving policy around learning analytics for SEAs, LEAs, and schools.

Effective programs

The report highlights several state and district initiatives as examples of effective learning analytics and secure, agile, and customized data systems. For example, North Carolina's statewide cloud computing initiative merges the student information and instructional improvement systems into one platform accessible to educators, students, and parents. The Dysart Unified School District in Arizona uses the iPAL system -- "I plan, I assess, I learn."

According to the report, Dysart developed "an electronic warehouse of information" incorporating student information, curriculum resources, and educator professional development options. Teachers use iPAL to work collaboratively to personalize instruction.

The district's College and Career Ready Advisory Committee, composed of community and business leaders as well as parents and educators, analyzes information to determine college- and career-ready characteristics. The LEA is planning to transition to cloud-based services. The report noted, "Dysart expects cost savings as it moves in this direction -- realizing, however, that there are potential policy implications in the new data warehousing environment."

Policy challenges

The report points out that stakeholder concerns over data breaches, potential of teaching to tests, and the possibility of student labeling are prompting states to develop policies around student data systems and learning analytics. The authors noted that during the 2014 legislative session, 32 states have introduced legislation, with 83 bills across the nation.

Among the report's recommendations for federal, state, and district leaders are:

• Continue federal guidance and technical assistance on FERPA and the Children's Online Privacy Protection Act.

• Incentivize learning analytics in ESEA reauthorization.

• Raise the cap on the E-Rate program to support learning analytics and leverage other potential funding sources.

• Incorporate learning analytics in implementation of the Common Core State Standards and college- and career-readiness standards.

• Require learning analytics as a component of teacher preparation, certification, and evaluation.

• Include learning analytics in local professional development, with responsible data use guidance.