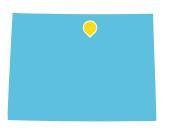
MATHEMATICAPolicy Research



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St. Vrain Valley Schools: **How Do We Interpret Developers' Claims?**



St. Vrain Valley Schools has been a leader in addressing student learning needs in innovative ways. The district received an Investing in Innovation grant in 2010 and a Race to the Top District grant in 2012. As part of the district's initiatives to personalize learning, teachers and staff have implemented educational technologies that help provide differentiated instruction to students.

Like many districts, St. Vrain Valley Schools does not employ dedicated research staff. To supplement their own data analyses, district staff relied on information from educational technology developers about the effects of their software applications on student outcomes. These developer reports usually consist of graphs that show students' learning gains over time.

St. Vrain Valley Schools

Location:Northern Colorado

Number of schools: 55

Number of students:

About 32,000

Student population:

64% White 30% Latino

3% Asian

1% Black

31% economically disadvantaged

THE INITIATIVE

Diane Lauer, the assistant superintendent of priority programs and academic support for St. Vrain Valley Schools, saw limitations in the reports that the developers provided and strategized to increase the district's capacity to conduct its own research and access to valuable information. In particular, she noted that the vendor reports often highlighted the success of a few students who were using the technology the most. She also found that the educational technology platforms offered limited data and asked developers to provide additional data in the district management dashboard. Lauer was often unsuccessful in convincing vendors to make changes to their dashboards. "School districts need more information to be able to evaluate a technology and know if we are getting a return on our investment," said Lauer.



Reports from the developer focused only on the few students who used the technology with fidelity.



But, the district wanted to understand the effect of the technology on all users.

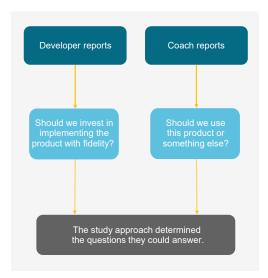
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Lauer wanted to know, "What is the likelihood that [the technology] is impacting student achievement?"To answer this question, Lauer and her colleagues in St. Vrain Valley decided to evaluate two adaptive literacy software programs in a series of rapid cycle evaluations. With help from Mathematica Policy Research and the Ed Tech Rapid Cycle Evaluation Coach, they conducted separate evaluations of each technology. Neither showed promising results. There was an 11 percent probability that one literacy software increased student reading achievement by their goal of 3.5 points and a 0 percent probability that the other literacy software reached that goal.

Lauer concluded, "This process has helped us answer some questions about the programs' effectiveness and has raised additional questions related to 'for whom?' and 'under what conditions?"

THE DETAILS

Lauer noted that she was "surprised" at the findings, which were "somewhat less positive" than the effects presented in the developer reports. She sent the evaluation findings to the developers. St. Vrain Valley staff met with the developers to discuss the discrepancies between the results from the Coach rapid cycle evaluations and the research results the developers had previously sent to them.



Lauer and her team realized their evaluations and the developers' reports answered different questions. The Coach evaluations focused on the effects of the technologies, regardless of how frequently they were actually used. These evaluations let them answer one question: Should we use this product or use something else? In contrast, the developers' reports focused on a subset of the students who used the software the most and compared them with students who used the software less often. If done well, comparing high and low users might help them answer another question: Do we get better outcomes if we invest in increasing the time students spend using this technology?

One of the developers recommended that St. Vrain Valley Schools conduct a study that takes into account whether students are using the technology as recommended. Lauer thought this would provide interesting information. But she also recognized that St. Vrain Valley staff realistically "may not have the time or tools in place to implement [the technology] as intended and in those cases, might be better served by another program with a better fit."

THE WAY FORWARD

After digesting the evaluation results and meeting with the developers, Lauer concluded, "This process has helped us answer some questions about the programs' effectiveness and has raised additional questions related to 'for whom?' and 'under what conditions?" As a result of the experience, one of the developers added functionality to their dashboard to give districts access to additional data that will enable them to track the implementation of the program in an ongoing way. For instance, St. Vrain Valley Schools will be able to see who is using the software and how they are using it. For now, Lauer is satisfied with this outcome. "This will allow us to do our own program evaluation and monitor the progress of students."



