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A new study finds students use technology and digital tools in every part of their lives — except school.

The study by AdvancED found few students use technology or digital tools in any meaningful way in their classrooms. Yes, teachers have been trained to use whiteboards and many do, but there's little hands-on use of technology by students themselves, according to observations of students in 144,000 K-12 classrooms.

"Kids use technology outside of school all the time for personal and entertainment purposes," said researcher Ludwig van Broekhuizen in an interview recently.

"They have never really been pushed or asked to use that same technology inside the classroom for learning," said van Broekhuizen, a former teacher and the AdvancED chief innovation officer.

After analyzing three years of direct classroom observations in K-12 schools across 39 states and 11 countries, van Broekhuizen found:

In more than half of classrooms, there is no evidence students are using technology to gather, evaluate or use information for learning.

In two-thirds of classrooms, there is no evidence students use it to solve problems, conduct research, or to work collaboratively.

The problem is not that schools lack access. More than eight in 10 teachers (81 percent) have access to personal computers or laptops in their classroom (PBS Future of Digital Learning Survey).

Because AdvancED's own study indicates that there is little variation in availability of technology across different types of schools, it is likely limited use of technology for learning is neither an issue of in-school student access to the tools (tablets, laptops, smartphones, etc.) nor an issue of technology infrastructure (broadband or internet). Rather, it may be due to a broad range of factors related to teacher preparation and training, the impact of technology on school culture, or concerns about the availability of technology at home or out of school that could increase disparities among students from different socioeconomic backgrounds.

Whatever the case, it is no longer a question of "whether" but rather "how" to incorporate and leverage the use of technology and digital tools to boost learning inside our K-12 classrooms. Technology has the potential to be the great equalizer as long as all students have access (both inside and outside school time) to these tools. And it is not just about having a smartphone, though according to a recent Pew Research Center survey, 73 percent of teens have them. Devices such as tablets and laptops in all their shapes and sizes provide students opportunities to organize their notes and assignments, explore interests, communicate with their teachers and peers, prepare presentations, work together on projects and connect with experts.

Even as digital tools become more portable, more sophisticated and more ubiquitous, they somehow aren't becoming more of a force in how students learn on a day-to-day basis. Van

Broekhuizen said the point of the study is not to preach that kids can't learn without technology. They clearly can, he said, "but what we see in many classrooms across the country is that kids are still doing exactly what I did when I went to school, and I'm 57. We still see work sheet work."

Too often, district leaders conflate teacher use of technology with student use. A superintendent of a district where classrooms were being observed told van Broekhuizen she expected to score at the highest level. She was flabbergasted when her system earned a very low score. "How can that be?" she asked. "We have trained all our teachers to use technology." He told the superintendent, "If our instrument was looking for teacher use of technology, you would have gotten a 3.5 (out of 4). We are looking for technology in the hands of students."

Why are schools reluctant to advance from teacher use of technology and digital tools to student use? Teachers have understandable fears about losing control of their classes and their students; even professors of social media lament how hard it is to prevent college students from straying when smartphones, tablets and laptops are allowed in class.

But van Broekhuizen said K-12 has never really tried to harness technology to personalize, deepen and better integrate learning across subjects.

"Until we can actually say we have given ample opportunity to see if it works, until we have set policies to make it work and trained teachers to help students and encourage them to use technology for learning purposes and to enhance their learning, until we actually have done all that, you can't say it is not working," he said.

Whether schools are ready or not, technology will eventually work its way to the classroom and into the hands of students, said van Broekhuizen. "We can probably do nothing, and everything will change anyway. Because at some point, the whole use of digital tools will be such an intrinsic piece of our society, by sheer force it is going to make its way in." – **Atlanta Journal-Constitution**



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