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Technology Report

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Becker Public Schools

Preparing self-directed learners to thrive in a changing global community

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SAMR and the 4Cs

A 3-Year Plan for Becker Public Schools

21st Century Learning requires organizations to meet the current requirements of our standardized tests while also striving to achieve the 4Cs: communication, collaboration, creativity, and critical thinking. The skills needed for success after high school are becoming increasingly complex, and schools must rise to meet new demands.

In addition to meeting traditional academic standards, students must also be prepared to tackle the demands of a modern world and modern workforce. A research report from Adobe Education[1] notes that, "In today's world, a proficient employee needs to be computer literate, visually literate, information literate, media literate, and digitally literate." According to a report from the Partnership for 21st Century Skills[2]: "Many of the fastest-growing jobs and emerging industries rely on workers' creative capacity - the ability to think unconventionally, question the herd, imagine new scenarios, and produce astonishing work." Technology assists with this type of capability. Pew reports[3] that 76% of Advanced Placement and National Writing Project teachers believe that digital tools such as the Internet, social media, and cell phones "encourage student creativity and personal expression." In addition, the National Writing Project reports that the

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[1] http://wwwimages.adobe.com/content/dam/Adobe/en/education/pdfs/higher-education-silent-transformation-white-paper-ue-r4.pdf

[2] http://www.p21.org/storage/documents/21st_century_skills_education_and_competitiveness_guide.pdf

[3] http://www.pewinternet.org/2013/07/16/the-impact-of-digital-tools-on-student-writing-and-how-writing-is-taught-in-schools-2/

creation and consumption of multimedia increases the likelihood of deeper learning and longer skill retention.

Technology is a key driver towards instruction that impacts student learning outcomes, both on standardized assessments and for 21st Century Learning skills. Students must have regular opportunities to engage in the 4Cs. In addition, they must have access to the instant feedback enabled by digital assessment and customized assistive technology. Being aware of the classroom setting and the typical learning experiences afforded to students in your organization is the first step towards the cultivation of 21st Century Learning.

What is our current reality?

Becker Public Schools is very fortunate to have the support of our community in such a way that we have access to technology like very few schools. Because of this, our students have the opportunity to learn with devices that can help them become the "self-directed learners" we want them to be. According to a recent survey of Becker students and staff, 94% (58% statewide) of teachers reported that students have a 1:1 opportunity to access technology as either a computer or a mobile device. While this is a testament to the commitment of Becker Schools, it is not a guarantee that technology will be utilized in a way that will help students learn.

Having technology is not enough to bring change in terms of learning and technology. Those involved in bring such change must believe that change is possible. Becker's recent survey showed that, 97% of staff believe that technology can enhance student learning. The area which needs the most attention involves professional learning. While students have access to devices and teachers believe such access can make a difference, 53% of staff reported they only spent 1 to 8 hours in school sponsored professional

development during the 2013-14 school year. It is this concern which will be the focus of the Department of Instructional Technology for the 2014-15 school year and beyond. The professional learning program will not center on the use of technology itself, but instead focus on 2 key concepts to help explore new and innovative practices. The first is SAMR, which focuses on teacher practice. The second is the 4Cs, which centers on what students do as a part of learning.

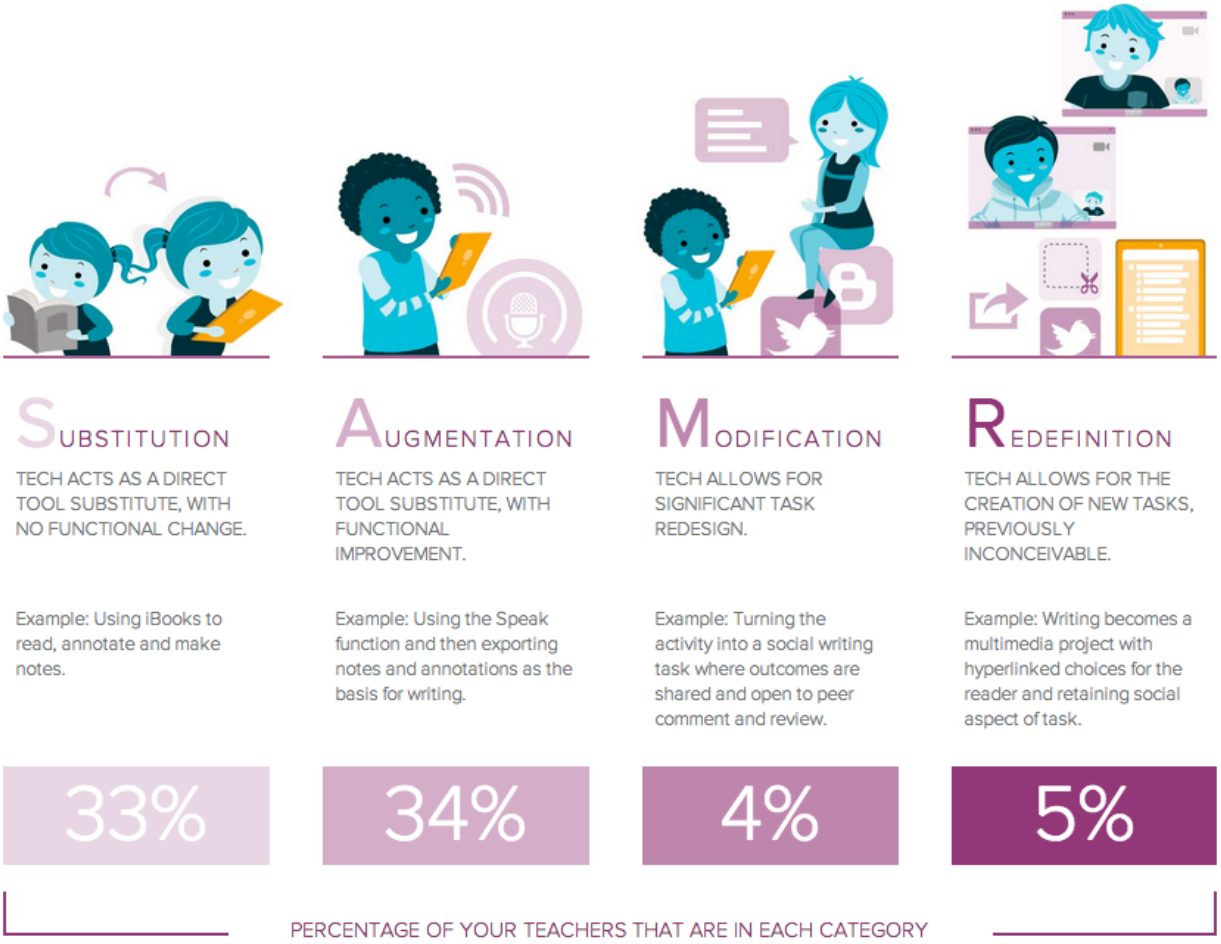
SAMR and the 4Cs?

Created by Ruben Puentedura, the SAMR model asks teachers if they are leveraging technology to plan and implement "highly effective learning that was previously inconceivable in traditional classrooms." Specifically, SAMR provides teachers, schools,and districts with a reflective tool to monitor technology integration implementation.

With SAMR, leaders can assess whether use of technology in the classroom serves as substitution (S), augmentation (A), modification (M), or actual redefinition (R) of a learning task. Importantly, performance at the higher areas of the spectrum, namely modification and redefinition, requires teachers to integrate multiple skills and strategies simultaneously. Primarily, progress along the SAMR continuum requires a close inspection of the 4Cs in the classroom– critical thinking, communication, collaboration, and creativity – all outcomes that have the potential for redefining the ways in which teachers and students integrate technology for learning.

It is important to note that teachers progress at different rates along the SAMR continuum, and many teachers actually teach lessons that fall into several different categories in a given week or semester. However, as teachers spend more time engaging students in the redefinition of learning, technology becomes both more necessary and more invisible. SAMR is a

model that assesses teachers' readiness to transform the classroom using digital technologies. It recognizes the evolution required to reimagine learning for today's students.



How will we move ourselves forward?

Effective professional development for teachers can have an enormous impact on teaching and learning in an organization. However, professional development experiences for teachers must be sustained and of high quality for improved learning outcomes to be realized. Specifically, the Center for American Progress[4] reports that 14 hours of high quality

[4] http://www.americanprogress.org/issues/education/report/2013/07/15/69592/high-quality-professional-development-for-teachers/

professional development on a single topic is needed before the classroom is impacted to a statistically significant degree. However, CASE data collected from hundreds of schools indicates that 80% of teachers report less than 17 hours of school-sponsored professional development around technology in the last 12 months.

Research from the International Society of Technology Education (ISTE)[5] also reveals that high quality professional development is job-embedded, personalized, and designed to promote skill transfer. Professional learning experiences must respond to teachers' interests, needs, and classroom settings. To support teacher learning and understanding concerning SAMR and the 4Cs, staff will have the opportunity to learn in small cohorts as part of the regular instructional day. The integration of the 4Cs as part of our technology integration program provides teachers with a framework that will naturally move them from more traditional substitution and augmentation. Instead of simply "using" technology for tasks that provide no functional change, students will be engaging in higher level activities where technology is now able to modify and redefine instruction. Starting in October, each month will focus on a particular area starting with Communication, followed by Collaboration, Critical Thinking, and Creativity. Interested staff will have the opportunity to meet for 20-30 minutes early in the month to share their thoughts and ideas regarding what that particular "C" may look and feel like in their classroom. Throughout the month, staff will have the opportunity to explore how technology can benefit students learning regarding the 4Cs.

To support such learning, Becker Public Schools has initiated the Digital Learning Mentor (DLM) program. A DLM is a teacher that has shown

[5] www.iste.org/learn/coaching-white-paper

both dedication to strong instruction as well as an innovative spirit and the capacity to connect with others. DLMs will provide their colleagues with examples and ideas for connecting technology to instruction at the Modification and Redefinition level when appropriate. The role of the DLM will not be centered on providing direct instruction of teachers regarding the use of the technology tools themselves. This task will be charged to the Director of Instructional Technology. Through this program, staff will have a greater chance of reaching the suggested 14 hours of high quality professional development needed to move learning forward. This opportunity will avoid the typical "sit and get" way of learning. Instead, teachers will have the chance to explore while instruction is taking place in a more natural and supportive environment. Providing teachers support at this "point of contact" is imperative to not only seeing short-term growth, but long-term innovation.

In order to realize the needs of today's learners, schools must meet not only the current requirements of today but help prepare students for what is yet to come. It will be our mission to help "prepare self-directed learners to thrive in a changing global community" by integrating technology when and where it can have the largest impact on learning. We will be working to consistently improve how teachers gain the understanding to recognize how to approach this change. We will be looking to give students the opportunity to communicate, collaborate, critically think, and create while using technology to both modify and redefine instruction. By doing so in a way that both focuses our attention and simplifies our approach, Becker Schools will continue to be a leader in how instructional technology can prepare our learners for what is yet to come.