

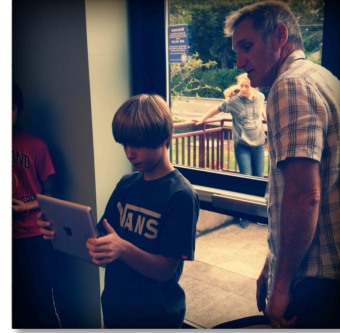


DIGITAL CONVERSION

— A Vision of Connected Learning —

Overview

Digital conversion describes the transformation of learning from paper-based resources and how students demonstrate their learning to an environment that includes curriculum and instructional materials in digital formats. Teachers and students have access to computing devices and the Internet anytime and anywhere. This conversion is centered on how students and teachers work together around concepts and skills. While the software and hardware devices are important supports in this transformation, they are not the drivers. The critical factors in Beaverton's digital conversion are the changes in how teachers access and incorporate additional learning resources in their work, and how students use technology tools and devices to explore tools and content, process information, and demonstrate their learning.



Connected To Our Goal

The Beaverton School District goal is for every student to graduate with many options and be prepared to:

- Think:** Creatively and Critically
- Know:** Master Content
- Act:** Self-Direct and Collaborate
- Go:** Navigate Locally and Globally

Transforming instruction with access to technology computing devices, software, and collaboration tools directly supports the Beaverton School District Goal. Using a wide variety of technology tools, students will have the ability to creatively direct and demonstrate their learning, access quality, real-time content, and collaborate with others. Students will graduate better prepared to successfully enter the world of higher

education, the job market, or other paths where technology use is a fundamental part of our world.

Connected To Our Pillars of Learning

To accomplish the District Goal, the Beaverton School District and community have committed to four Pillars of Learning. The Beaverton School District Digital Conversion is aligned to, and supports our Pillars of Learning.

We Expect Excellence



Teachers have access to the tools and resources needed to best serve students and inform student growth.

We Innovate



Innovative practices, and the ability to solve complex problems are aided by technology.

We Embrace Equity



All students deserve to be prepared for post-secondary success in a world where all paths require technology proficiency.

We Collaborate



Technology tools allow students to work together anytime and anywhere.

Our Vision for Digital Conversion

Learning must be dynamic, engaging and tailored to the unique needs of each student. Our students have unlimited potential as well as specific learning needs and interests. Now and in the future, they will be asked to think, create, innovate, communicate, and collaborate as engaged members of our global community. Learning shifts must occur in the classroom as students and teachers work together with the varied resources used in our daily lives to find, consume, evaluate, and contribute information. Our classrooms will mirror the world we are preparing our students to navigate and ultimately, lead.

Students need to be able to access information to work in collaboration with teachers, peers and experts on what and how they learn. Printed textbooks contain static information, without an easy way to update the information. The goal of pursuing digital content is to meet the unique learning needs of students so that learning is engaging

and efficient, available at any time, and steeped in authentic problem solving. Access to high quality, dynamic information for all students will help close the equity gap.

Teachers need the opportunity to access, modify, and customize curriculum to meet the unique needs of their learners. Teachers know their students well and also know the resources necessary to meet their learning needs. As curriculum transforms to a digital format accessed largely online, students and teachers need modern, mobile technology devices. A combination of district-owned and personally-owned devices will address the lack of available resources available throughout the district, making the initiative sustainable and equitable. In addition to meeting curriculum needs, our Digital Conversion will provide students with technology to support exploration and creation of content. Our vision is that every student and teacher has immediate access to technology and the Internet throughout the school and school day to support their learning.

Building A Foundation For Success

In 2010, a team of researchers studied one-to-one computing implementations from almost 1,000 schools nationally and published their results in *The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness* (Greaves, 2010). The results of the study provide the keys to a successful implementation, including: Time for teacher learning and professional collaboration, staff training, and integration into both core and intervention classes. To achieve our vision of connected learning, we must also address other significant areas:

“Our digital conversion effort aims to give all students, regardless of their socio-economic background or special needs, a chance to succeed in today’s digital world.”

- Mark Edwards, *Every Child Every Day: A Digital Conversion Model For Student Achievement.*

Staff Development: Beaverton’s Digital Conversion will result in a change of practice for teachers, and a change in the classroom environment as well. Studies have found that educators are more likely to incorporate technology into their instruction when they have access to collaborative teaching colleagues who employ technology into practice

(Strudler and Herrington, 2009). Sustainable, just-in-time, job-embedded support will be necessary to ensure teachers are equipped to lead this change. The District's staff collaboration and professional development portal, TeacherSource, will be highly leveraged in providing resources and support for teachers.

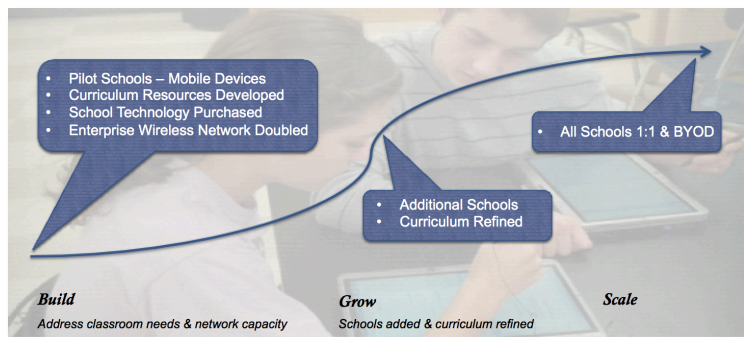
Wireless Networking and Connectivity: The wireless network at every school will be upgraded to meet the connectivity needs of district-owned and personally-owned devices. Open, robust networks will ensure students and teachers ability to access instructional resources. Data security will be IT's highest priority.

Learning Management System: A Learning Management System is an online space used to provide content, deliver assessments, and allow for teacher/learner exchange of documents and communication. The implementation of a Learning Management System will provide a workspace for students and teachers to interact through content and activities and assessments to be delivered and scored.

Immediate School and Classroom Technology Needs: District-wide, one-third of computers currently used by students are unable to be repaired due to the age of the equipment. Since the move to District-owned and personally-owned computing devices will take some time, it is important that we address critical and immediate school and classroom technology needs.

The Plan For Digital Conversion

Digital Conversion at the Beaverton School District will take a number of years. Our



multi-phased plan allows us to start with schools and classrooms that are ready for the conversion. As we develop and refine curriculum resources and instructional practice, we will see growth as additional schools and

classrooms are added. This focused and intentional growth will allow us in time to successfully scale change throughout the District.

What It Will Look Like

Build: The first two years will be the Build Phase and will focus on adding the necessary infrastructure, wireless network, a Learning Management System, and ensuring that pilot schools and classrooms have the necessary staff supports. An Innovation Grant process will allow schools and classrooms to assess their readiness and will target staff development for teachers. Additionally, aging computers used by students will be replaced ensuring that students at all schools will have a better experience using technology for their learning in spite of their schools readiness, of lack thereof, in terms of digital conversion.

Grow: Informed with learning from the early adopters, we will be ready to expand the conversion to additional schools and classrooms in years 3 and 4. During this phase, it will be time to replace teacher technology in addition to increasing the number of schools and classrooms where there is a combination of district-owned and personally-owned computing devices.

Scale: As the majority of schools and classrooms have transformed, the next phase beginning in year 5, will be to scale the conversion throughout the district so that every student has access to rich instructional resources accessible anytime and anywhere.

Conclusion

The Beaverton School District Strategic Plan places students at the center of our collective vision and assumes responsibility for their individual achievement. Technology tools, applied appropriately, have the power to engage students, allow for individualized and personalized learning experiences, and foster innovation and creativity in each student's learning journey. Beaverton's Digital Conversion will create a system that supports individual student learning, provides students and teachers with the tools and information they need, and prepares students for success in their future endeavors.

References

Edwards, M. 2014. *Every Child, Every Day: A Digital Conversion Model For Student Achievement*. New Jersey: Pearson Education Inc.

Greaves, T.; Hayes, J.; Wilson, L.; Gielniak, M.; & Peterson, R., *The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness*, MDR 2010.

Strudler, N. and D. Herrington. 2009. Quality support for ICT in schools. In *International handbook of information technology in primary and secondary education*, ed. J. Voogt and G. Knezek, 579-596. New York: Springer