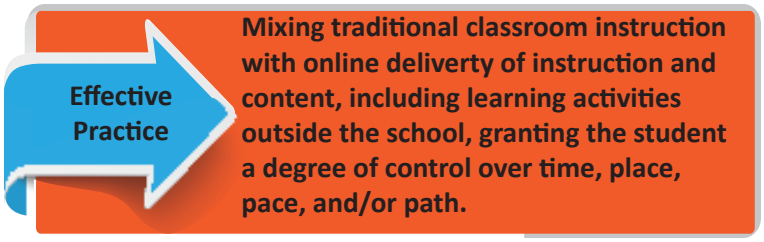
Center on Innovations in Learning

Wise Ways®



Indicator: All teachers connect students' out-of-school learning with their school learning. (B4)

Explanation: Blended learning enables personalized learning at scale, offering students both traditional classroom and online learning experiences. Out-of-school learning opportunities can strengthen student engagement and interest for learning occurring within the school context. Technology greatly expands and enhances students' capacity to learn outside of the traditional classroom and can offer increased opportunity for personalized and blended learning. Educators can use technology to provide interest-driven learning experiences for students, and can participate in learning networks that allow them to collaborate with other professionals within their communities to create these types of learning experiences.

Questions: What are the benefits of connecting students' out-of-school learning with their school learning? How can digital tools foster the connection between out-of-school learning and school learning?

Learner-centered, or personalized learning refers to "tailoring learning for each student's strengths, needs and interests—including enabling student voice and choice in what, how, when and where they learn—to provide flexibility and supports to ensure mastery of the highest standards possible" (Patrick, Kennedy, & Powell, 2013, p. 4). The student is actively involved with the teacher in co-constructing their individualized learning pathway, and the location, time and pace of learning may vary from student to student (Redding, 2016). Blended learning models grant students some degree of control over their learning pathway, and provide a mix of traditional classroom instruction and online delivery of instruction and content (Staker & Horn, 2012). While K-12 blended learning research is limited (Sparks, 2015), some evidence suggests that students with access to well-implemented blended learning models outperform those experiencing only one type of instruction (Means, Toyama, Murphy, Bakia, & Jones, 2010; Bakia, Shear, Toyama, & Lasseter, 2012; Means, Toyama, Murphy & Baki, 2013; Pane, Griffin, McCaffrey, & Karam, 2014; Pane, Steiner, Baird, & Hamilton, 2015). Technology can contribute in part to learning beyond the classroom, and may help students take advantage of learning opportunities available within out-of-school settings such as museums, libraries, community centers, and a variety of other settings within their local communities and across the globe (Scott, 2015).

What Are the Benefits of Connecting Students' Out-of-School Learning with Their School Learning?

Many within K-12 education are advocating for increased out-of-school learning opportunities for students, and citing the importance of these experiences to academic success. The National Science Teachers Association (NSTA) recommends an expansion of out-of-school, or informal learning opportunities, especially for communities which may be underrepresented within Science, Technology, Engineering and Math (STEM) fields, as well as stronger links between preK-12 classrooms and these informal learning settings (NSTA, 2012). The NSTA advocates for a larger role for informal science institutions in "the design and delivery of professional supports for teachers in both pre-service and in-service contexts…[and] systematic promotion of strong and sustained links between districts, schools and informal settings" (p. 2). These connections between out-of-school and classroom contexts can provide resources to

expand the curriculum, reinforce key concepts, provide links to authentic and real-world contexts, and promote career awareness (Lauer, Akiba, Wilkerson, Apthorp, Snow, & Martin-Glenn, 2006; NSTA, 2012; Kim & Quinn, 2013). For example, an extended learning collaborative project in New Hampshire that illustrates this connection involved high school seniors planning and building a greenhouse to be used by their school after graduation, as described by Richmond (2015):

> Before drafting blueprints, the students read up on how other local schools were teaching agriculture to determine what type of design would be most useful to future classes at Pittsfield. They made an oral presentation to the school board at a public hearing for permission to carry out the construction and completed all the paperwork for the building permits…All of the skills required for the project – reading nonfiction texts, collaborating as a team and even defending an evidence-based argument – are part of the New Hampshire state competencies for English Language Arts. (pps 6-7)

Thigpen (2014) concludes that student engagement and interest in school can by strengthened by making explicit connections between classroom learning and learning opportunities for students across a variety of youth-serving institutions, and argues that "meeting college- and career-readiness standards for all students requires that learning doesn't start and stop with the school bell" (p. 8).

How Can Digital Tools Foster the Connection Between Out-of-School Learning and School Learning?

Technology offers a way to move learning beyond the classroom and build better connections between teachers and outside community educators, resources and programs that foster student learning (Scott, 2015; U.S. Department of Education Office of Educational Technology, 2016). For example, a school lacking adequate science facilities can provide virtual chemistry, biology, anatomy and physics labs to students, and a rural school with mobile data collection tools and online collaboration platforms can allow students to collaborate with peers anywhere in the world on a variety of projects (USDE Office of Educational Technology, 2016). Technology tools offer opportunities for teachers to provide personalized learning experiences for students and increase equity among disadvantaged student populations, as well as increase teachers' capacity to develop blended learning experiences for students (Darling-Hammond, Zielezinski, & Goldman, 2014; Molnar, 2014; Thigpen, 2014). The most recent National Education Technology Plan suggests that students are most often not supported in using technology for out-of-school learning, and recommends that states and districts assess and document potential learner pathways to expertise via technology by examining combinations of both formal and informal learning experiences (USDE Office of Educational Technology, 2016). The HIVE Learning Networks offer an example of how personalized connections between school and out-of-school learning can be facilitated for students:

> HIVE Learning Networks are made up of community-based organizations, including libraries; museums; schools; after-school programs; and individuals, such as educators, designers and artists. HIVE participants work together to create learning opportunities for youth within and beyond the confines of traditional classroom experiences, design innovative practices and tools that leverage digital literacy skills for greater impact, and advance their own professional development (USDE Office of Educational Technology, 2016, p. 15)

The Chicago HIVE programs, for example, help middle and high school students develop competencies within interest areas such as advocacy/social justice, digital/web literacy, youth development and leadership, and science, technology, engineering, art and math (STEAM) (HIVE Chicago, n.d.). Increasingly, teachers are also advocating for interest-driven learning, based on the notion that "students gain more knowledge and skills at higher levels of intellectual rigor when the learning originates from issues or activities that innately captivate them" (Garcia, 2014, p. 10). Interest-driven learning requires that teachers intentionally help students connect what they are learning in the classroom with the outside world by creating learning activities and environments that promote this connection (Garcia, 2014).

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