



BENWOOD



## 1:1 – EMPOWERING STUDENTS & TEACHERS THROUGH TECHNOLOGY

**Rationale:** What would a school with resources to implement PBL (problem/project-based learning), 1:1 technology (one device per student) and STEM (science, technology, engineering and math) look like? Picture a dynamic, technology-infused environment where confident students are actively engaged with one another and curriculum is integrated and focused on real-world applications. Technology is student-centered rather than solely in the hands of the teacher and serves as a tool that empowers students and teachers. Reading and writing are not relegated to one part of the day and occur constantly both in and out of the classroom. Educational social media tools are used to enhance and carry instruction outside of the school day. Kids are tackling relevant problems found in their own communities. Worksheets and textbooks are all but nonexistent, and assessment is on-going and a part of the everyday classroom experience. Technology is seamlessly integrated into the classroom such that it fully supports learning allowing students to take more ownership of their own education. Instruction is personalized and adapted to each student's needs. This vision not only describes an innovative and vibrant learning environment where students thrive and fully engage, but it also includes teachers who are invigorated, collaborative, and eager learners themselves.

The dynamic learning environment described above is rooted in project or problem based learning (PBL). PBL asks students to explore a meaningful question, solve an engaging real-world problem, or develop a solution to a design challenge during a unit of study. Imagine the skills students need to be able to tackle tasks such as these. Students must collaborate with each other, learn content and skills, develop an answer or solution, create high-quality work, and then present their work to other people. By focusing on real-world authentic problems, the PBL process motivates students and is often described as “pulling” students through the curriculum rather than the “pushing” or “dragging” teachers often feel. It provides students with a *need* to know, understand, and demonstrate what they learn, beyond simply getting a good grade or because the teacher said so. As a pedagogical tool, PBL provides opportunities for students to practice and hone skills needed in STEM and the workplace such as collaboration, communication, perseverance, creativity, and critical thinking. Another hallmark of PBL is partnerships. Business, industry and community organizations partner with schools to help support the creation of curriculum-aligned, real world problems. These partners also serve as resources to the students and teachers as they work through a PBL experience. Education becomes truly community-based which leads to support of and involvement in schools.

Literacy is integral to problem/project-based learning because throughout the PBL process students must constantly access, use and apply information from texts. This deep focus on literacy is organic to the PBL process, and students in classrooms with 1:1 technology have more opportunities for reading and writing than students in traditional settings. Devices are used as research tools but also provide teachers with increased ways to provide feedback and support students as they hone reading and writing skills. This focus on literacy supports the



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implementation of the Common Core State Standards as students communicate, collaborate and innovate around information obtained from analyzing texts. Coupled with tools that allow teachers to constantly assess students' progress and provide personalized, on-going support, students grow as readers and writers in an authentic way.

We live in a fast-paced, quickly changing world powered by rapidly evolving technology. Consider that the first personal computers and cell phones arrived on the scene in the 1980s, and just 30 years later over half of all adults in the United States report owning a smart phone with more computing power than devices of only a few years ago. Increases in the reach of technology are also exponential with the largest growth in smart phone ownership among those reporting less than \$30,000 in annual income. This rapid change in technology and increase in access has huge implications for education. We no longer need educators to teach students information rather we need to focus on teaching kids **how** to access, use and apply information. In addition, we need to harness the power of technology to provide a personalized, engaging educational experience for all students. This emphasis on skills rather than knowledge is a driving force behind the Common Core State Standards and the Next Generation Science Standards with a critical focus on college and career readiness. PBL serves as the framework for bringing standards-aligned, community-centered instruction supported by technology to classrooms.

**Vision Statement:**

We will be a model for creating technology-infused learning environments which empower students to be critical-thinkers, collaborators, innovators, and self-sufficient learners.

**Mission Statement:**

We will create a collaborative professional learning network focused on improving student engagement and learning through literacy-focused, problem/project-based learning supported by technology.