

Shared Vision and Rationale

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Vision Statement

At Brumby Elementary School, our mission is “One Team. One Goal. Student Success”, and our vision statement is “Inspiring personal success through collaboration and respect”. Our mission and vision are supported by the Georgia Standards of Excellence, and our School Improvement Plan emphasizes improvement in reading and math, with a focus on low socioeconomic status (SES), students with disabilities (SWD), and English speakers of other languages (ESOL). Technology practices will be implemented which support critical thinking, collaboration, creativity, and communication (4 Cs) through project-based learning. Individual student performance will be enhanced by use of technology for differentiation, and will serve to redefine learning as an authentic, real-world experience.

Rationale

Upon analyzing our SIP and staff surveys, as well as conducting interviews with administration, we are committed to improving reading and math scores through use of technology to increase student engagement, with a specific goal of increasing non-proficient to proficient by 3% on End-of-Grade Assessments (EOG), as well as Math Inventory (MI) and Reading Inventory (RI). “In reviewing peer-reviewed journal articles on the effects of education technology integration on achievement, seven studies published since 2000 have shown significant effects in mathematics, and fourteen articles have shown significant effects in reading and literacy” (ISTE, 2008). Teachers need to be aware of not only the Brumby Elementary Strategic Technology Plan, but also the ISTE

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Standards that it supports. Any areas of the Brumby School Improvement Plan that do not implement technology to support student achievement should be realigned. Available technology should be evaluated as to how those tools can be implemented to enhance project-based learning, and how technology integration allows for collaboration, communication, critical thinking, and creativity. Consistent professional learning opportunities should not only train teachers on how to use the technology, but should be ongoing in order to support use of that technology specifically for student achievement, not just instruction and assessment, as research shows “more positive outcomes when schools focus more on training and immersion rather than just implementation with one to one initiatives” (Sutton, 2015).

Microsoft Innovative Educator (MIE) certification is a major component in encouraging teachers to use technology for teacher collaboration and critical thinking among students. Teams and SharePoint are ways for teachers to collaborate on project-based learning, instruction, and assessment. “Because project-based learning is filled with active and engaged learning, it inspires students to obtain a deeper knowledge of the subjects they’re studying” (Edutopia, 2008). OneNote is a way to implement online journals that involve student, teacher, and parent communication, as well as creativity and critical thinking. These are all part of MIE certification that teachers and staff are currently undergoing, and a main component is using these technologies to directly impact student achievement. Project-based learning through OneNote and Sway gives students the opportunity to collaborate and show their learning in creative ways. “Project learning is also an effective way to integrate technology into the curriculum” (Edutopia, 2008).

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Instead of using Office 365 programs for just instruction and assessment, student designed projects increase critical thinking skills in allowing students to communicate what they know creatively. “In addition to participating in traditional assessment, they might be evaluated on presentations to a community audience they have assiduously prepared for, informative tours of a local historical site based on their recently acquired expertise, or screening of a scripted film they have painstakingly produced” (Edutopia, 2008). Project based learning also provides for differentiation, as students can select tools that support their level of expertise, and the technology itself can be enhanced by use of add-ins and extensions. Inclusion of embedded video showed that “this format allowed students who were nonreaders or emerging readers to access the course material without needing to read text on the page”, and provides for self-pacing and reflection, which develops metacognition, an aspect of critical thinking (ISTE, n.d.). The 4 Cs should be referenced in professional learning sessions so that teachers can further relate how each component can be enhanced through technology. “Ultimately, a piece of technology is a resource and how that technology is embraced and utilized by the teachers themselves is the ultimate variable of success” (Sutton, 2015).

The essential conditions that are supported by use of technology for project-based learning, differentiation, and authentic learning are student-centered learning, assessment and evaluation, implementation planning, and engaged communities. “Education paradigms are shifting to include online learning, hybrid learning, and collaborative models” (New Media Consortium, 2013). Project-based learning that requires students to think critically and creatively is student-centered. Implementation planning requires collaboration and communication among staff and students, and this is also when

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differentiation can be planned for within use of technology tools. Differentiation in project-based learning can also involve assessment and evaluation, as student products will be more authentic and individual. Through platforms such as Office 365 and OneNote, the school community (administration, staff, and students) and support community (parents and business partners) will be more engaged as they become more aware of how technology improves student engagement and achievement. “ISTE members have monitored research on the effectiveness of education technology on student outcomes for more than 20 years, and one convincing trend has emerged: when implemented appropriately, the integration of technology into instruction has a strong, positive impact on student achievement” (ISTE, 2008).

Diversity Considerations

As a diverse population comprised of 11% ELL, 11% SWD, and 72% economically disadvantaged, we must consider technology availability and access for students and families, at home and at school. Assistive technology nor gender groups are addressed in our SIP, although we have a specific class for students with disabilities per grade level, as well as special needs pre-k classes and two autism units. If there is any group of students that technology can benefit, it is those with disabilities, whether physical, intellectual, or both. Use of technology through project-based learning would meet the needs of students with disabilities by allowing for student choice and differentiation. “Struggling readers and students with disabilities could see the benefit from the use of malleable and flexible digital materials”, which also serve to “meet the needs and preferences” of students and “prepare students to succeed in digital learning environments” (Zabala, 2012).

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We currently have a 1:1 technology initiative that is being met for grade level classrooms through laptops and iPads, but not necessarily available to all students in extension classes. We are on target to meet student needs within the school; however, once students leave the classroom, many are unable to access the internet at home, meaning no outside work using OneNote, online journals, teacher blogs, or any technology learning tools that benefit the 4 Cs. “Students from disadvantaged backgrounds are less likely to have access to more rigorous STEM-learning opportunities”, and “students from high-poverty backgrounds were far less likely to have rigorous learning opportunities when it comes to technology” (Boser, 2013). Strategies for addressing these challenges encourage educators to “legitimize the significant role culture plays in students’ educational experience” and “create opportunities for students to access technology outside of the classroom” (ISTE, 2008). One way to encourage use of technology outside of the classroom would be to research programs that provide internet access for low income families, and tech tools that could be checked out as necessary for specific projects. Also, after-school programs that teach parents about Office 365 would benefit families who may not have access to technology training. “Students who don’t have access to devices or the internet at home lose the collaborative and creative opportunities they have during school”, which is counter-productive to project-based learning (DeVaney, 2014).

“As technology-related job opportunities in the United States continue to grow, educators are struggling to bridge the digital divide that persists between the genders” (Ring, 2008). In support of gender equality, programs that are often more male-centered (such as STEM) could be developed primarily for girls, as well as a mentor programs

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involving women in the community whose careers reflect knowledge of science, technology, engineering, and/or math. “Encourage schools to create safe, girl-only spaces for technology programs. These contexts need to value, recognize, and respect girls’ identities along multiple lines of intersection” (Scott, 2009). STEM in itself tends to provide for multiple opportunities, as students can contribute individually and work collaboratively in activities such as Sea Perch, Science Olympiad, and the STEAM Symposium. These existing clubs could invest in larger numbers of female students as leaders, and would also be a specific way to involve mentors from the community to inspire and assist female students in meeting learning goals through use of technology. “From providing professional role models to supervising student-run clubs, teachers can undertake a variety of strategies both in and out of their classrooms to engage young women in technology” (Ring, 2008). Apart from STEM, we can ask questions and provide opportunities for female students to explore multiple digital career paths through project-based learning. “Does a female student have a flair for words? She may want to become a technical writer. Is she artistic? She may enjoy trying her hand at computer animation. Showing girls how technology lets them express themselves can help break down stereotypes that prevent them from exploring it” (Ring, 2008).

Stakeholder Roles

As we refer to ourselves as the Brumby family, stakeholder roles are very important in ensuring that we meet the criteria of our shared vision. We were able to interview our Administrators and Instructional Technology Coach concerning their vision for technology within our school. Teachers also completed a survey to show their understanding of, confidence in, and level of interest in various technology tools (see

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Appendix). Parents should also be invited to complete surveys describing their knowledge of and access to the internet and Office 365, so that we can more fully understand how to support our students' families. The specific stakeholders who will contribute to the success of our shared vision include Administration, Academic and Technology Coaches, Teachers, Parents, Students, and Community. "Technology coaches can implement multiple strategies and purchase cutting-edge devices, but if they don't have buy-in from educators and administrators, they will be fighting a losing battle" (ISTE, n.d.).

Administration

Administration would be responsible for communicating the vision to all other stakeholders, specifically the teachers who will be implementing the majority of the technology in their classrooms. In doing so, they will help transform traditional classrooms into digital classrooms, and could communicate this information through Teams in Office 365, staff meetings, and grade level trainings. "ISTE recommends that administrators at the local school level ensure that technology investments and professional development align to curriculum standards...by identifying teachers' needs for classroom and building technologies and for professional development, administrators can ensure that funding is targeted where it will be most efficient and effective" (ISTE, 2008).

Academic and Instructional Coaches

Academic and Instructional Coaches would work together to develop specifics of the plan in alignment with state standards and county initiatives, oversee the actual technology requirements, and provide coaching/instruction to teachers. "Ongoing

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professional development needs to be valued and integrated into the culture of schools.

There is immense pressure placed upon teachers to incorporate emerging technologies and new media into their classrooms and curriculum” (New Media Consortium, 2013).

The Instructional Technology coach would also be responsible for equipping the school itself with devices and software programs that support these processes, including creating Office 365 accounts for all students.

Teachers

Teachers would expand upon implementation of instructional technology in ways that support student use, with a goal of designing project-based learning activities that provide differentiation and authentic learning experiences. This would include a flexible learning environment, and maintaining Office 365 accounts for homeroom students.

Collaboration among teachers using Teams would be necessary in order to engage students in meaningful content through technology. “Teachers’ direct application of technology must be aligned to local and/or state curriculum needs”, and “technology must be incorporated into the daily learning schedule (i.e., not as a supplement or after-school tutorial)” (ISTE, 2008).

Parents

Parents will be given opportunities for affordable internet and training in specific components of Office 365 in order to help their children succeed outside of the classroom. “Effective technology integration requires leadership, support, and modeling from teachers, administrators, and the community/parents” (ISTE, 2008). Families who can display digital citizenship and appropriate use of resources will positively impact student learning.

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Students

Students are the main focus of the shared vision, and their role is to participate in learning activities guided by their teachers in order to show understanding of grade level standards in various subject areas. “In order for students to get a well-rounded education with real-world experience, they must also engage in more informal in-class activities as well as experience learning outside the classroom” (New Media Consortium, 2013).

Students will be involved in authentic learning activities that demonstrate knowledge through projects using technology, specifically components of Office 365 such as OneNote and Sway. In collaborating on projects, students will also demonstrate communication, creativity, and critical thinking skills.

Community

Community support entails creating partnerships with businesses and individuals that can provide resources for teachers, students, and parents. These resources could include technology training, mentors for students or student groups, sources of internet access, recycled technology tools, or funding for technology initiatives. Community support also provides for authentic learning experiences as students would be involved in real-world experiences through exposure to mentors’ careers and roles within society, as students “quickly see how academic work can connect to real-life issues – and may even be inspired to pursue a career or engage in activism that relates to a project they developed” (Edutopia, 2008).

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References

- Boser, U. (2013). *Are schools getting a big enough bang for their technology buck?*
Center for American Progress. Retrieved from
<https://www.americanprogress.org/wp-content/uploads/2013/06/UlrichEducationTech-brief-3.pdf>
- DeVaney, L. (2014, November 12). *7 reasons digital equity is a social justice issue.*
Retrieved from eSchool News: <https://www.eschoolnews.com/2014/11/12/digital-equity-access-938/?all>
- Edutopia. (2008). *Why teach with project-based learning?: Providing students with a well-rounded classroom experience.* Retrieved from Edutopia:
<https://www.edutopia.org/project-learning-introduction>
- ISTE. (2008). *ISTE Policy Brief: Technolgoy and student achievement - the indelible link.* Washington, DC: International Society for Technology in Education.
Retrieved from <https://computerexplorers.com/Student-Achievement-Brief.pdf>
- ISTE. (n.d.). *Blended learning transformed our school.* Retrieved from ISTE Blog:
<https://www.iste.org/explore/Lead-the-way/Blended-learning-transformed-our-school?articleid=896>
- New Media Consortium. (2013). *NMC Horizon Report: 2013 K-12 Edition.* Autin, Tx:
New Media Consortium. Retrieved from <https://www.nmc.org/pdf/2013-horizon-report-k12.pdf>
- Ring, S. (2008). Tech gURLs: Closing the Technological Gender Gap. *Edutopia.*
- Scott, K. (2009, November 13). *The New Digital Divide: Where are Our Girls?*
Retrieved from Equity Alliance: <http://www.niusileadscape.org/bl/the-new-digital-divide-where-are-our-girls-by-kimberly-scott/>

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Sutton, 2. (2015). *What the research says about 1:1*. Retrieved from Edutopia:

<https://www.edutopia.org/discussion/what-research-says-about-11>

Zabala, G. B. (2012). AIM for Digital Equality. *ISTE*.

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AppendixEssential Conditions Survey

1. What Web 2.0 or productivity tools do you currently use on a daily basis? Please identify which are used for instruction, assessment, and/or by students.
2. Do you have a plan in place to evaluate the effectiveness of these tools, in order to inform instruction and further technology implementation (individually, or as a grade level)?
3. Are there resources/trainings that you need to effectively use technology for student-centered learning and/or communication?
4. What role does Office 365 play in your specific classroom/subject area?
5. In order of importance, how would you list the following uses of technology:
 Instruction Assessment Teacher communication Parent Communication
 Please add any other uses
 _____.
6. In order of importance, how would you list the following benefits of technology:
 Creativity Communication Collaboration Critical Thinking
 Please add any other benefits
 _____.
7. Would you be willing to participate in professional learning networks aimed to increase knowledge and implementation of specific tools and strategies?
8. Are you a participant in social media platforms (such as Twitter)? If so, please check the ways you use the platform.

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___ Parent communication ___ Policy awareness ___ Educational chats

___ Teacher communication ___ Professional development ___ Program

advocacy

Additional comments

_____.

9. In your specific classroom, how many students do not have consistent access to technology outside of the school day?
10. In your opinion, what is the number one way we can enhance the vision for technology integration within our school setting?