

INSTRUCTIONAL TECHNOLOGY GRANT PROPOSAL

Name of Applicant: Amy Calley

District/School: Cobb County/Brumby Elementary School

Date: 4/17/2019

Total Cost of Project: \$9798.68

Title of Project: 1:1 iPad Access for Art

To what organization will you submit this grant application in the future? Cobb Tank

- I. Why is this project important (In 2-3 paragraphs, describe the need for the project and its relevance to the shared vision for instructional technology)?

This project is important as the incorporation of iPads in the art classroom can benefit all students in the school, as they rotate through art over the course of sixteen days. In support of Shared Vision initiatives, such as project-based and authentic learning, students need access to individual technology. Although we have shared iPad carts that can be rotated throughout the Core Extension, and a shared iPad cart with Performing Arts/Music, this only allows 4-5 iPads to be checked out at a time. Another goal of the Shared Vision is 1:1 access, so an iPad cart dedicated to Visual Arts would help meet this goal.

This technology can also be used for differentiation, as students can work at their own pace or use add-ins and extensions to support individual learning needs. Use of iPads can also help address low SES, SWD, and gender concerns, as all students will have access to devices, with an option for check-out as well. Project-based learning through iPads also addresses the 4Cs, which are communication, collaboration, creativity, and critical thinking. Through use of iPads for critical thinking and connections with math and reading, we can support the goal of increasing math and reading scores by 3% on End-of-Grade Assessments (EOG). This also contributes towards meeting the goals of our Strategic Technology Plan and School Improvement Plan, which includes student and teacher use and understanding of the ISTE Standards for Students (<https://www.iste.org/standards/for-students>).

- II. What would you like to accomplish (In 2-3 paragraphs, describe the project and list instructional objectives/project outcomes.)?

The iPads will be used specifically for student achievement in terms of project-based learning and the 4Cs, with a goal of authentic interactions that serve to improve math and reading scores by EOG assessments. The instructional objectives include use of Office 365 apps for OneNote to create individual digital journals, which can be used to record STEAM activities and connect learning in Visual Art with grade level standards. Students will also be

able to use this technology to create screencasts, videos, and podcasts to demonstrate knowledge and understanding.

The specific ISTE Standards that will be met through objectives/project outcomes are as follows:

- Students will use iPads to create online STEAM journals in the OneNote application (ISTE Standards 1a, 1b, 1c).
- Students will use iPads to create screencasts, podcasts, and videos through Web 2.0 tools such as Adobe Spark, Screencast-o-matic, and Flipgrid as part of project-based learning (ISTE Standards 7b, 7c).
- Students will work collaboratively with others to demonstrate understanding of grade level and Visual Art standards, in response to authentic, real-world situations (ISTE Standards 3c, 3d).
- Students will exhibit digital citizenship through use of online tools (ISTE Standards 2a, 2b, 2d).
- Students will develop solutions to problems through selection and management of online tools, while making connections with various subject matter (ISTE Standards 4b, 4d).

III. In what ways is this project an example of exemplary technology integration (In 2-3 paragraphs discuss your project regarding one or more of the following: LoTi, SAMR, TPACK, TIM, etc.)?

This project supports exemplary technology integration in that it allows students to make connections between subject areas while also solving real-world problems. In addition, students have the opportunity to work collaboratively, and will employ critical thinking and creativity through selection and management of online tools to demonstrate learning. This would constitute a higher LoTi level as higher order thinking skills are required to solve authentic, real-world problems. Technology will also involve hands-on activities that connect to grade level standards through student-centered instruction. Collaboration will occur between students, as well as with outside sources.

As far as TPACK, Technological Content Knowledge will be evident through use of the iPad device itself, as well as through applications such as Office 365, OneNote, video, screencasts, and podcasts to record and demonstrate learning. Pedagogical Content Knowledge applies to the grade level and Visual Art standards that are incorporated into instruction and assessment, and use of online digital journals through OneNote supports Technological Pedagogical Knowledge.

Specifically, iPads will be used during the creative design process, which mimics the engineering design process involving asking, researching, imagining, planning, creating, testing, and improving. This requires students to think individually while working collaboratively to solve a real-world problem, and then record/demonstrate knowledge/solutions through use of technology. Not only will this employ the 4Cs, but will also provide opportunity to show characteristics of digital citizenship.

IV. How will you complete the work? (Describe how the project will be completed.)

A. Describe how the instructional objectives/project outcomes will be met (2-3 paragraphs).

The instructional objectives will be met through use of iPads for Office 365 access, so that students can use OneNote for digital journals, which involves STEAM initiatives through reading, writing, math, and science, and art. Assessment will occur through observation of student interaction, as well as technology use and digital citizenship quizzes implemented through the Quizizz app.

Instruction will begin with a question related to a real-world problem, and students will begin researching the problem individually. Collaboration will occur as students work in small groups to share ideas about possible solutions, and will brainstorm ways to further expand upon their combined efforts. Students will connect their learning through means of reading, writing, and drawing, and record their learning through use of digital journals in OneNote. To further demonstrate learning, students will select a Web 2.0 tool such as Screencast-o-matic, Spark Video, or Flipgrid, and provide an explanation of their solution to the problem.

B. Describe the time involved (project length including amount of time each day/week; include a timeline for planning and implementation).

- Project Length – Ongoing throughout the school year of 180 days
- Planning – 4 hours per week
- Daily – Individual planning to develop and plan grade level iPad lessons
- Monthly – Planning with grade level teachers to discuss connections and integration among various subject areas, specifically STEAM
- Implementation – 80 minutes per homeroom class, divided into two day 40-minute class periods, rotated over 16 days

C. Describe the people involved (grade level/subject & # of students, teachers and/or staff, other stakeholders).

- Students – Approximately 500 students from grade levels 3-5
- Subject Areas – Reading, Writing, STEAM (Science, Technology, Engineering, Art, and Math)
- Teachers – Art Teacher, 2 Science/STEM teachers, various grade level teachers (for collaboration purposes)
- Instructional Technology Coach/Academic Coach

D. Describe any professional development that you or others will complete prior to implementing the grant.

The entire staff of Brumby Elementary School is currently undergoing Microsoft Innovative Educator (MIE) certification that supports teacher and student use of Office 365 and

OneNote, which will be completed prior to grant implementation. Ongoing training, including follow-up classroom implementation, would be necessary to provide support for this project. Teachers need to have strategies for troubleshooting technology issues, and for instructing students on specific device and application use.

- E. Describe the materials needed for the project (provide links to relevant websites; include a written description of how the technology/ies will benefit students).

This project will require a class set of 30 iPads, as well as cases and an iPad cart for charging and transportation. The cart will be located in the art classroom, but can be moved to different locations as necessary for learning. Office 365 will need to be uploaded to each iPad, as well as the specific OneNote application. Access to Web 2.0 tools such as Screencast-o-matic, Spark Video, and Flipgrid will also be necessary. Student accounts in OneNote will need to be created, as well as individual digital journals within that program. The availability of 30 iPads will ensure that each student will have device access, especially in the event of technical issues or difficulty. Objectives of using iPads for research, documentation, and presentation of learning will be through use of the cart and programs.

- V. What is the timeline for assessing accomplishments and objectives/project outcomes (In 2-3 paragraphs, describe the program evaluation procedure. Explain how each objective will be measured and how success will be determined.)?

Using the Quizizz app, students will take a pre-assessment at the beginning of the year to determine knowledge and understanding of basic functions of Office 365 and OneNote, as well as their views concerning digital citizenship. Results will be analyzed, and checklists will be incorporated so that students can assess their learning on an ongoing basis. Students will be encouraged to select their own Web 2.0 tools for demonstrating knowledge, but will be required to use a variety of tools throughout the school year. A post-assessment will be given at the end of the year, as well as a questionnaire that will reflect items on the checklist. Specific ISTE Standards for Students and technology/grade level objectives will be introduced and reinforced through each lesson.

Technology-based learning occurring during each lesson may span various lengths of times throughout the art rotation. Classes are seen two days in a row for 40-minute sessions, but not again for another 16 days. Therefore, some students may continue a project over a matter of weeks, but that could mean only three actual class periods. Students will be encouraged to complete work within a certain time frame, so that multiple tools can be used and assessed. Online digital journals through OneNote can be accessed anytime, so if students choose to continue working outside of class, they may. Checklists will be developed within the journals, and OneNote will also contain Files and a Collaboration Center, all of which will serve as assessment tools. Presentations that students create based upon their learning will stand alone as a final means of assessment, and will be graded based upon a rubric with technology and grade level objectives and standards either not meeting, meeting, or exceeding.

- VI. How will the students be impacted by the project (In 2-3 paragraphs, include details regarding

how the impact on students will be assessed and reported to students, parents, teachers, and others.)?)

Technology quizzes, checklists, and questionnaires will demonstrate an impact upon student growth and achievement related to technology, art, and grade level standards as applicable to STEAM. Having 1:1 access to iPads in the art classroom will fully support implementation of technology devices, apps, and programs necessary to create this impact.

Student achievement will be improved through use of iPads for collaboration, communication, critical thinking, and creativity, as programs and apps encourage students to think individually and also work together to create a presentation demonstrating their solution to a problem. The opportunity to use online digital journals for recording and sharing will also provide a way for teachers, parents, and students to understand the process of project-based learning, and how iPads and various programs/apps can support student engagement and achievement. As students are required to read, write, and use art, math, and science applications to complete projects through technology, this will have a positive impact upon math and reading scores as students learn to apply knowledge across subject matter. Video and screencast presentations will also be shared with parents, students, and teachers among various grade levels, which will create even more awareness of the impact of 1:1 technology in the art classroom.

VII. What is the proposed budget? Include information on the following:

A. Materials/supplies

- Office 365 app, including OneNote
- Web 2.0 tools such as Screencast-o-matic, Spark Video, and Flipgrid

B. Equipment

- 30 iPads - \$8970
- 30 iPad cases – \$399.68
- 1 iPad charging cart – \$429.00

C. Total Cost of Proposed Project (include a line item for any required professional development)

- \$9798.68

D. Additional Funding Sources

- Title 1 Funds
- County Technology Funds
- Visual Art Technology Funds

V. List your supporting references.

References

Cobb County School District. (2016). *2018-2020 Technology plan*. Retrieved from Cobb County School District: <http://www.cobbk12.org/centraloffice/Technology/TechPlan18-20v01.pdf>

Georgia Department of Education. (2019). *Georgia standards of excellence*. Retrieved from Georgia Department of Education: <https://www.georgiastandards.org/Georgia-Standards/Pages/default.aspx>

International Society for Technology in Education. (2016). *ISTE Standards for students*. Retrieved from ISTE: <https://www.iste.org/standards/for-students>

Sheninger, E. (2014). *Digital leadership: Changing paradigms for changing times*. Thousand Oaks, CA: Corwin

INSTRUCTIONAL TECHNOLOGY GRANT PROPOSAL EVALUATION FORM/SCORING RUBRIC

Total Points (out of 300): _____

1. Impacts a variety of skill levels and/or learning styles or impacts an important target population.

Possible number of points: 60 _____

2. Clearly identifies standards and learning objectives/project outcomes being addressed.

Possible number of points: 60 _____

3. Pedagogically sound, based on research and/or best practices.

Possible number of points: 60 _____

4. Clear plan for assessment of project and goals with examples of implementation methods.

Possible number of points: 60 _____

5. Impacts large number of students and/or can be recycled/reused.

Possible number of points: 60 _____

General Comments: