Tech Plan 2012-2013

Conclusions drawn from available research is that the 1-to-1 learning experience provides many positive outcomes for students, staff, and the community. Among the outcomes mentioned most are:

- Improved writing skills and depth of students' research.
- Increased student interest in learning and ownership of the learning process.
- Improvement in student and staff attendance.
- Reductions in student behavior problems.
- Increased parental interest in school activities.
- Improved student and staff morale.
- Reductions in lecture/presentation instruction and an increase in project based learning activities.

http://techland.time.com/2012/02/22/new-study-finds-ipads-in-the-classroom-boost-test-scores/

What is the main benefit of a 1-to-1 iPad program to the students and teachers?

Currently, with computer labs and computers in the classroom, teachers need to share the use of technology with other teachers making access to technology a planned event and not always there when needed, when it can have the most impact on instruction. With a 1-to-1 program the iPad supports learning in the way student's think. By putting a world of easily searchable information at their finger tips, inquiry based learning becomes more possible. Students will be able to direct their own learning with the teacher acting as facilitator and guide rather than sage of knowledge. Inquiry based learning demands that students develop critical thinking skills in order to solve problems and find answers to questions. Additionally, as students have more ownership of their learning, engagement in the process increases. Several studies indicate that there is a clear correlation between student engagement and retention of material.

Control studies show a clear increase in student engagement in schools and classrooms that integrate 1-1 technology effectively. Increased student engagement coupled with interactive web 2.0 tools will increase the opportunity for deep inquiry based learning experiences.

Communication
Faculty, students, parents, and administrators will have increased communication tools with the iPads. Every student will have an email that teachers will have easy access to. Teachers can send email reminders to students, teacher websites can be set up with RSS feeds, QR codes on handouts/activities, increases ease of communication while decreasing the need to consume resources (paper, time, etc) to do so. Additionally, various applications allow for increased communication between students, increasing the opportunities for collaboration.

Collaboration
Student collaboration becomes easier to manage. Students are "always" connected to each other. Cloud based applications eliminate the "he's not here, and has all our work" disruptions.   Teachers have increased ability to monitor collaboration, teach collaboration skills and procedures and give the "academic work" of investigating, synthesizing and creating to the students

Creativity
IPads become the catalyst to increased creativity in numerous areas of our organization. "We can't because we don't have (the resources, time, and interest) as an excuse is eliminated. Teachers have unlimited ways of integrating content, skills & assessment into meaningful & engaging experiences for students. Students have unlimited options in demonstrating their understanding and abilities.   Increased connectivity allows for greater flexibility in bringing teams of people together to solve problems. IPads will also allow for greater creativity in our curricular offerings.

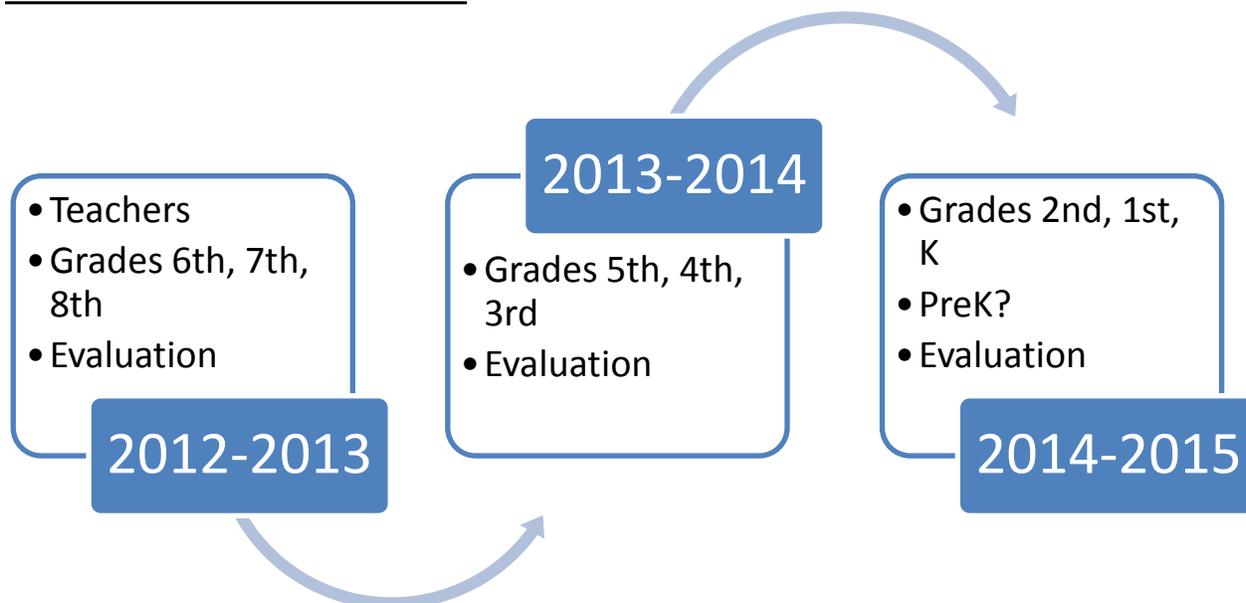### *Information & Media Literacy (digital literacy)*
Students and teachers will be required to evaluate the innumerable tools at their fingertips. Evaluation of sources, perspectives, and purpose will become the focus of conversations as new applications and uses are introduced. We not only want to educate students using the tools of the 21st century they are living in, but how to successfully evaluate and use those tools.

How does this program affect our special education students?
This program can have a very positive impact on all our students, especially our special education students because technology offers many programs and tools that will support their needs and give them better access to the curriculum. Most of these programs and tools are available for free and include the following:

- Web-based course management and other software that allows teachers to post class materials and assignments on-line which especially helps students with organizational issues.
- These resources also promote collaborative research and writing project.
- A vast number of free on-line resources that can be used to enhance learning such as virtual math manipulative, virtual science labs, customized quiz and vocabulary building software, podcasts and numerous language learning resources, on-line primary documents from our national archives.
- Easy to use multimedia tools that give students another way to demonstrate and share their understanding of content.
- Multi-modal delivery methods are facilitated by the use of an iPad for those students who have difficulty reading or those who have difficulty following the spoken word.
- There are many apps that allow for text to speech, graphic organizers, and story builders.
- There are a wide variety of apps for students on the Autism spectrum.

How will this be introduced?

2013-2014
- Grades 5th, 4th, 3rd
- Evaluation

2012-2013
- Teachers
- Grades 6th, 7th, 8th
- Evaluation

2014-2015
- Grades 2nd, 1st, K
- PreK?
- Evaluation

How will this be paid for?

I would like to use the REAP grant for the iPads, money from the PTC & TGS Foundation. We will get an estimated $6,000 to $7,000 this year from the TGS Foundation and we will get an estimated $10,000 from the PTC this year. We can also sell the Junior High Clickers back to Promethean each year we implement.

Student Tech Fees 2012-2103: $5,000
Reap Grant 2012-2013: $21,000
TGS Foundation: $6,000
TGS PTC: $10,000
TOTAL REVENUE: $42,000

2012-2013
- ➢ IPad for teachers: 11 iPad and cases
- ➢ IPad for 6th, 7th, 8th Grade: 75 iPad and cases
- ➢ Cost of IPad: $32,594
- ➢ Cost of Cases: Otterboxes at $60.00 would be $4,500
- ➢ Cost of Keyboard/Case at $70.00 would be $5,250
- ➢ We will need to buy screen protectors for each iPad.

Estimated Cost for 2012-2013: $42,344 - $42,000 revenue = *$344.00 only expense*

2013-2014
- ➢ IPad for Grades 4th, 5th, 6th Grades
- ➢ Cost of iPad: $32,594
- ➢ Cost of Cases: Otterboxes at $60.00 would be $4,500
- ➢ Cost of Keyboard/Case at $70.00 would be $5,250
- ➢ We will need to buy screen protectors for each iPad

Estimated Cost for 2013-2014: $42,344

2014-2015
- ➢ iPad for Grades PreK*, 1ˢᵗ, 2ⁿᵈ, 3ʳᵈ Grades
- ➢ Cost of iPads: <u>$32,594*</u>
- ➢ Cost of Cases: Otterboxes at $60.00 would be <u>$4,500</u>
- ➢ Cost of Keyboard/Case at $70.00 would be <u>$5,250</u>
- ➢ We will need to buy screen protectors for each iPad

<u>Estimated Cost for 2014-2015: $42,344</u>

How will the teachers use the iPads?
Considering that we have an aging computer inventory we need to update the computers in the classrooms immediately. Considerable time is wasted on computers that take time on task away for slow login periods.

What is going to be the expectation is that the teachers use the iPad to un-tether from the smart board, use the iPad as our clicker device, and use the iPad as their data entry portal for testing.

The use of Kahn Academy is also going to be used in the classroom. If you are not familiar with Kahn academy I have given you a link to follow:
http://www.khanacademy.org/

The iPad has an app for that:
http://itunes.apple.com/us/app/khan-academy/id469863705?mt=8

Here is a link for excellent teacher/education apps:
http://www.teachhub.com/20-amazing-ipad-apps-educators

We can still run Fast Math, Lexia, and Study Island from the iPad and we can still access our Teacher Ease from the iPad.

The iPad has an app for that:
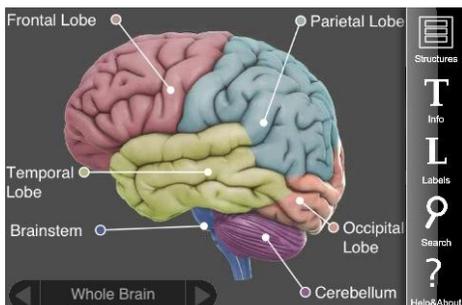http://itunes.apple.com/us/app/khan-academy/id469863705?mt=8

In addition, the amount of apps that are free and that can be purchased are incredible. If you have an apple ITunes account please check out the app store or please click on the link: http://www.apple.com/education/apps/

http://www.appolicious.com/education/articles/9492-top-20-must-have-educational-iphone-ipad-apps-used-by-real-teachers-in-the-classroom

These are the education apps most listed by educators on Appolicious:

1. 3D Brain (iPad, iPhone. Free)
Reviewed by educator **lmorris**: "This is a great learning tool for any student. It shows and describes all the parts of the brain."
Subject/Grade: Science (Biology). 4-12.
Listed by: Alline, techsupv, and **SkylineiPads**.

2. Art (iPhone, $0.99)

Reviewed by educator **lmorris**: "This is a great app for learning about priceless pieces of art. With many pieces of art, the human form is the subject matter. Several paintings in this collection show the human body so teachers will need to use their best judgment. There is also an option to link high quiz scores to an online social gaming site. Appropriate for older students." **Subject/Grade:** Art. 6-12.

Listed by: **justatitch**, **uwcsea** and **LaurieFowler**.
3. BrainPOP Featured Movie (iPad, iPhone. Free)

BrainPop movies teach kids different each day in a variety of subjects, and include quizzes. **Subject/Grade:** Language Arts, Math, Science. Social Studies. K-12.

Listed by: **d9091**, **mnelson438**, **SkylineiPads** and **Alline**.
4. Early Jamestown (iPad. Free)

Reviewed by educator **lmorris**: "This app is a chapter from an interactive textbook series [of the early days of the Jamestown settlement]. At the end of the chapter, they give review questions. The chapters are written to keep student interest and the pictures are great."
**Subject/Grade:** Social Studies 3-6.

Listed by: **klbruni331**.
5. Edmodo (iPhone, iPad. Free)

Reviewed by 9th grade teacher **justatitch**: "We have an iPad pilot program at my school and this app is the most commonly used app for sharing stuff. It's easy to use and great for sharing documents and other information. I love it!" **Subject/Grade:** Classroom Management 8-12.

Listed by: **sjunkins**, **Alline**, **akuswara** and **justatitch**.
6. The Elements: A Visual Exploration (iPad, $13.99)

Learn about the periodic table in a hands-on way. Choose any element -- copper for example, and see various copper objects - a Persian weave chain, a brass ring, a Chinese bronze - and then rotate them with your finger to get a 3D view. This is one of those iPad apps that brings learning to life. **Subject/Grade:** Science (Chemistry) 8-12.
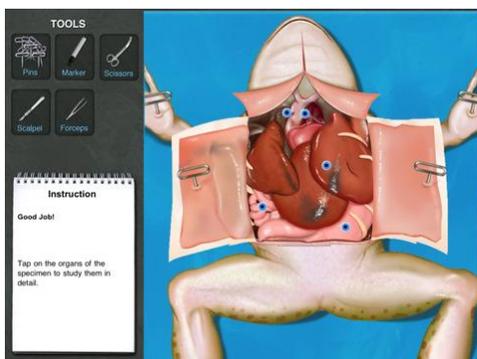
Listed by: **Alline** and **elemenous**.
**6. Frog Dissection (iPad, $3.99)**

Kind of amazing that instead of a real scalpel, and a slippery, formaldehyde-reeking amphibian that you dread slicing into, you can now dissect a virtual frog. The virtual frog is complete with pins to hold down the limbs, a marker to identify where you'll make the cut, scissors to open up the smooth abdomen, and forceps and scalpel to prod and poke at the internal organs. A robotic-sounding female voice guides you through the dissection. **Subject/Grade:** Science (Biology). 6-12.

Listed by: **Alline** and **meesterkurt**.
7. History:Maps of the World (iPad, iPhone. Free)

Lots of different maps including ancient maps. Can be displayed on VGA. **Subject/Grade:** Social Studies 4-12.
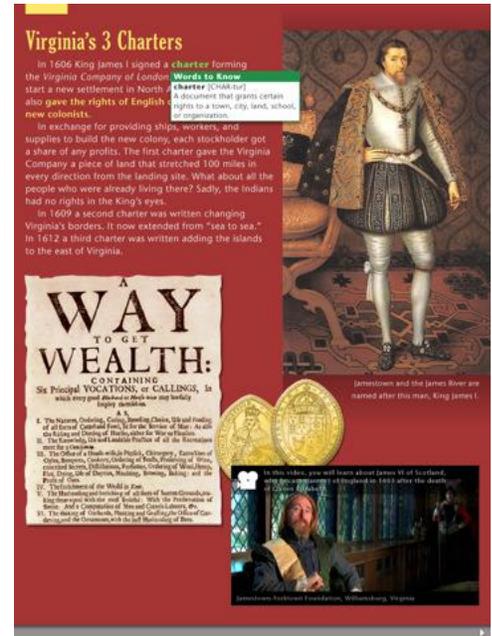
Listed by: Alline, janstearns, and **uwcsea**.
8. GarageBand (iPad, iPhone. $4.99)
Reviewed by Apple Distinguished Educator and K-5
teacher **mrneedleman**: "Great fun for creating music. Improves
students' rhythm and counting ability."
Subject/Grade: Music. 2-12.

Listed by: Alline, mrneedleman, and **iteachlounge**.
9. Mad Libs (iPhone. Free)
Great for reviewing parts of speech while creating a silly
story. **Subject/Grade:** Language Arts. 1-5.

Listed by: Alline, LaurieFowler, and **mrneedleman**.
10. MathBoard (iPad. $4.99)
Drills for basic math (addition, subtraction, multiplication, and division). Quizzes can be generated from wrong
answers and timed or saved. **Subject/Grade:** Math. 1-5.

Listed by: Alline and **LRoe**.
12. Motion Math HD (iPad. $2.99)
Reviewed by educational technology specialist **randyrodgers**:
"Motion Math HD is a challenging game that requires players to place
numbers (decimals, fractions, and percentages) on the proper
location on a number line. This is done using the iPad's gyroscope.
Players tilt the iPad left or right to make falling figures land in the
appropriate spot on the line. It is easy to learn, but it becomes
substantially challenging after a few levels. A great game for kids
learning number sense, probably most appropriate for the upper
elementary grades." **Subject/Grade:** Math. 3-6.
Listed by: elemenous.

13. NASA App (iPhone. Free)
NASA's official app has space images and videos, a calendar of their
missions, a and a launch schedule. You can also tap on satellites
and learn about how and why they were launched into space. Inspiring to future astronauts! **Subject/Grade:** Science
(Astronomy). K-12.

Listed by: techsupv and **wfryer**.
14. Number Line (iPhone. Free)
This game has you put fractions, decimals, and percentages in
order. Great for kids new to these concepts.
Subject/Grade: Math. 2-8.

Listed by: techsupv, Alline, SkylineiPads and **LRoe**.
15. Professor Garfield Cyberbullying (iPad, Free)
Teach kids anti-bullying messages and strategies for dealing with
cyberbullies with the help of Garfield and friends.
Subject/Grade: Internet Safety. 3-6.

Listed by: [mnelson438](#) and [SkylineiPads](#).
**16. [Project Noah](#) (iPhone. Free)**

Spot and document flora and fauna in your local area. **Subject/Grade:** Science (Biology, Botany, Ecology) 2-12.

Listed by: [akuswara](#).
17. [Stack the States](#) (iPad, iPhone. $0.99)

Reviewed by educational technology specialist [randyrodgers](#): "Stack the States is a geography quiz game in which users are asked trivia questions (e.g. What state's capital is Austin?) about U.S. states. When responding correctly, users drop the state onto the bottom of the screen, attempting to stack the states beyond a line about a third of the way up. When the line is reached, users are awarded a state as a prize."
Subject/Grade: Social Studies. 1-5.

Augmented Stargazing
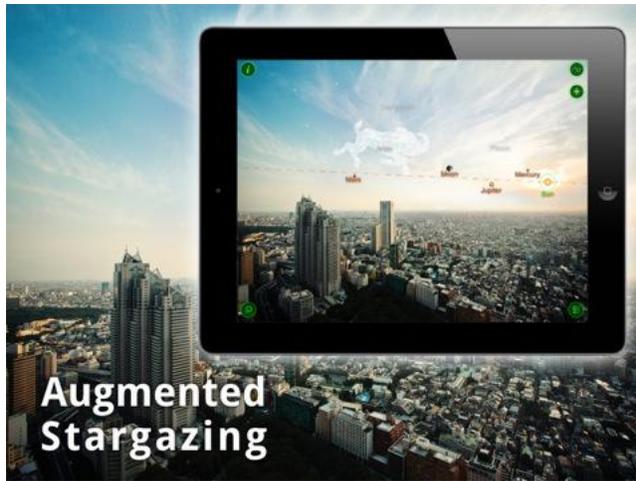
Listed by: [elemenous](#) and [kellerisd](#).
18. [Star Walk for iPad – interactive astronomy guide](#) (iPad, $4.99)

Star Walk is a virtual planetarium. Point your iPad at the sky and see what stars, constellations, and satellites you are looking at in real-time.
Subject/Grade: Science (Astronomy). K-12.

Listed by: [Alline](#).
19. [StoryKit](#) (iPhone. Free)

Students can create their very own storybook with this app by adding text and images.
Subject/Grade: Language Arts. K-12.

Listed by: [elemenous](#), [techsupv](#), [wfryer](#) and [cchausis](#).
20. [Toontastic](#) (iPhone, iPad. $1.99)

Reviewed by assistive technology specialist [hillavee](#): "Toontastic is so much fun! The interface is easy to use. Toontastic explains the elements of a story arc, breaking it down into segments that are manageable for any user. Multiple backgrounds are available, or use your own. Characters can be placed in the scene from the Toontastic library, or make your own. To "animate", simply record the story by moving the characters while talking! How much fun it is to spark the imagination with this ingenious app.
Subject/Grade: Language Arts. K-12.

Check out more **[iPhone and iPad education app lists](#)** submitted by educators.