

For a brief overview of SSCS, please see "The Learning Ecology at SSCS" located on YouTube at: www.youtube.com/watch?v=RbtPVWrwM_I



Leveraging iPads for Teaching & Learning at Sharon Springs Central

Presented by:
Mr. Patterson Green - Superintendent & Principal
Mr. Ben Jacaruso - Secondary Math
Mr. Tom Yorke - Secondary ELA



Mobile, Connected Technology Allows for a Lean-forward (Participatory) Presentation

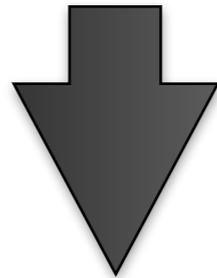
- Our Backchannel:



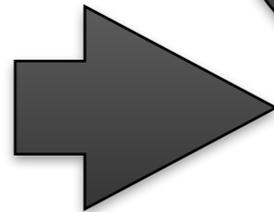
<https://todaysmeet.com/SSCSiPads1to1>

An Example of Constructing the Conditions for Engaged, Student-Centered Learning

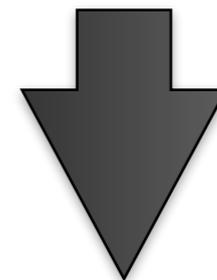
Engaged, passionate student discussion



An inspired project design
(see: <http://www.mybigcampus.com/bundles/hidden-identity-finding-one-s-self-in-romeo-and-juliet-this-is-me-in-three-imovie---328743>)



Sample Student Project
(see: <http://youtu.be/84IGvClb9UM>)



Authentic feedback, assessment, & reflection.

Student Growth Resulting From Student Engagement - A 9th Grade Student's Reflection (see: <http://youtu.be/40aGzmXUZbM>)

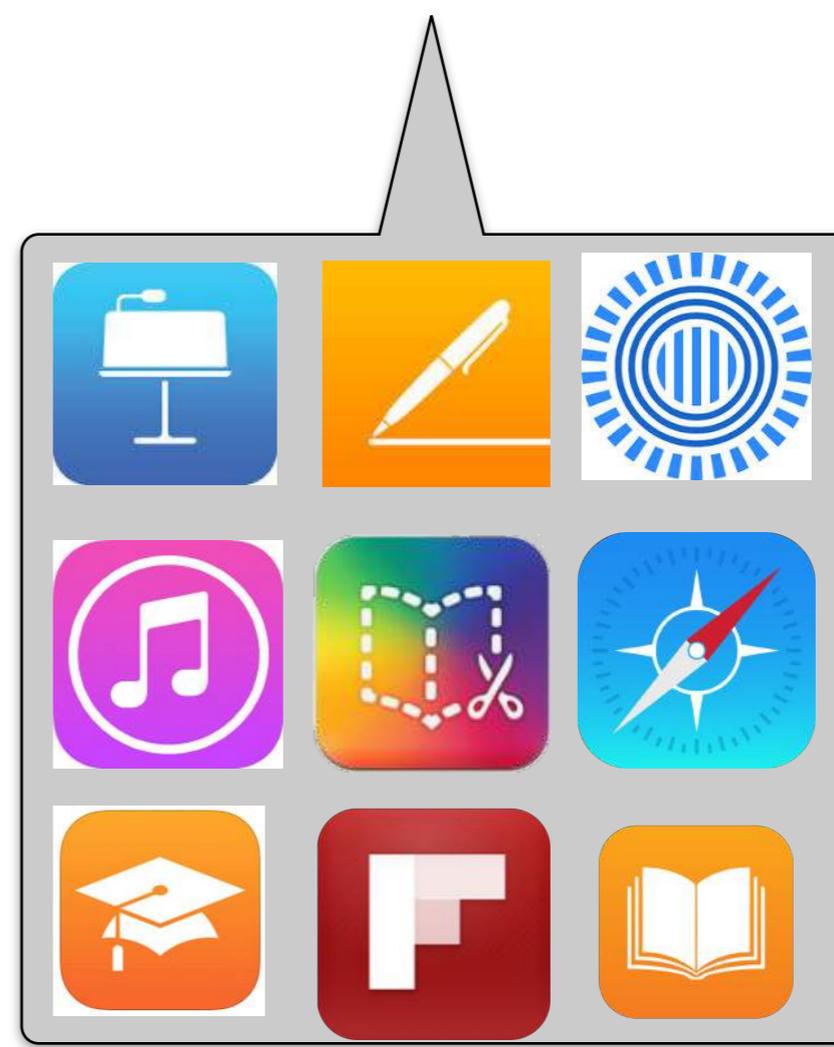
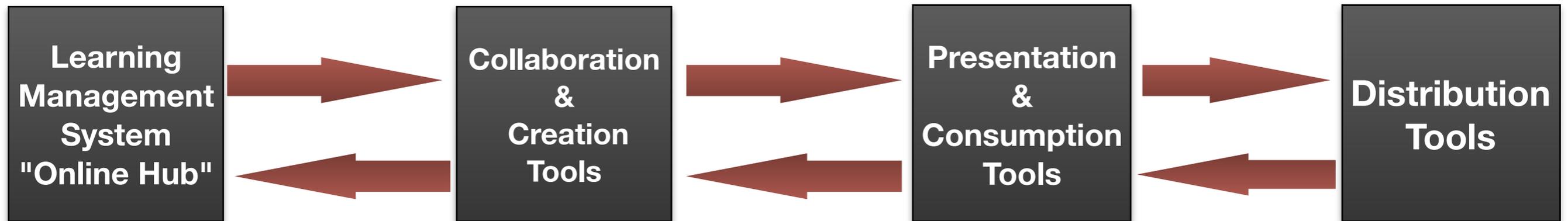
The Task:

Post your "app mash-up" in a cohesive video and explain how your mash-up reflects your ability to express your learning in an innovative, engaging, and inventive way.

The Response (see <http://youtu.be/6kHod4HYIrs>)

- In my app mash-up, I used the following apps: ExplainEverything, Flipagram, Splice, and I brought everything together using iMovie. In a way, I also used Pandora, iMessaging, My Big Campus, iTunes, and Safari.
- I used the song, "Unwritten" by singer/ songwriter, Natasha Bedingfield and Daughtry's, "No Surprise."
- This video reflects my ability to express my learning in an innovative, engaging, and inventive way. I have learned to compose, edit, export, and display information and art in a way that gets my point across and is engaging to viewers. I show this by putting my photos and videos in time with the music and voice-overs, using titles to speak to the audience, and using the sequences of images and clips to represent an idea and to enhance my movie. Instead of just a "collage" of videos and pictures set to music, my movies now communicate a clear idea through art, music, words, and images, in an order that improves the significance of the point I am "arguing".

Tools used at SSCS for Maximizing a Blended Learning Approach with iPads in a 1:1



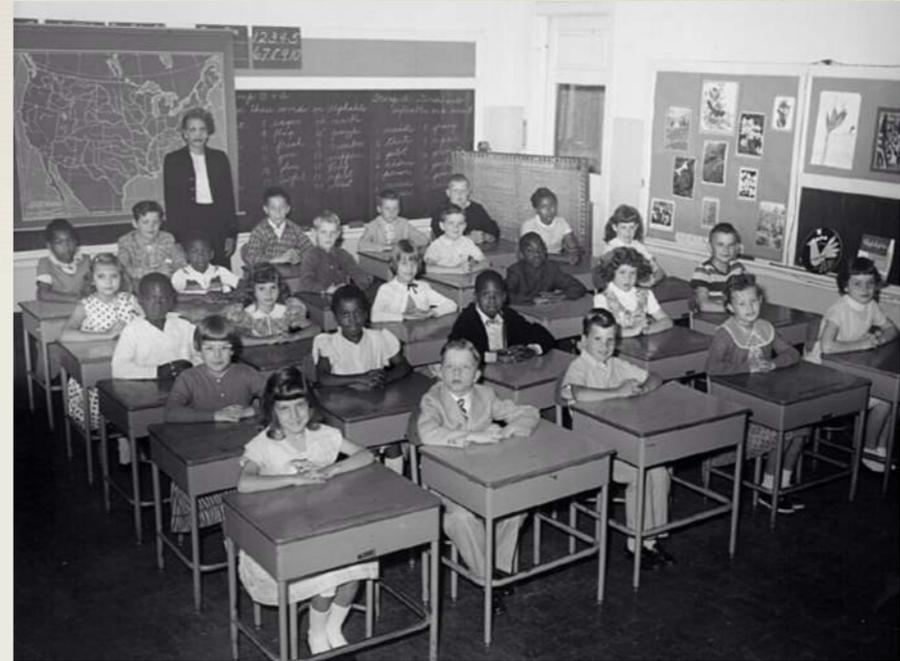


Sharon Springs Central School's Secondary Math Teacher: Ben Jacaruso



Teaching Mathematics in an
iPad 1:1 Environment
June 2012-2014

The Traditional Classroom



- * Teacher Centered
- * Lecture Based
- * Homework: 20 - 30 problems reinforcing the lecture material



What is flipping the classroom?

- * Flip teaching or a flipped classroom is a form of blended learning in which students learn new content online by watching video lectures, usually at home, and what used to be homework is now done in class with teachers offering more personalized guidance and interaction with students, instead of lecturing.

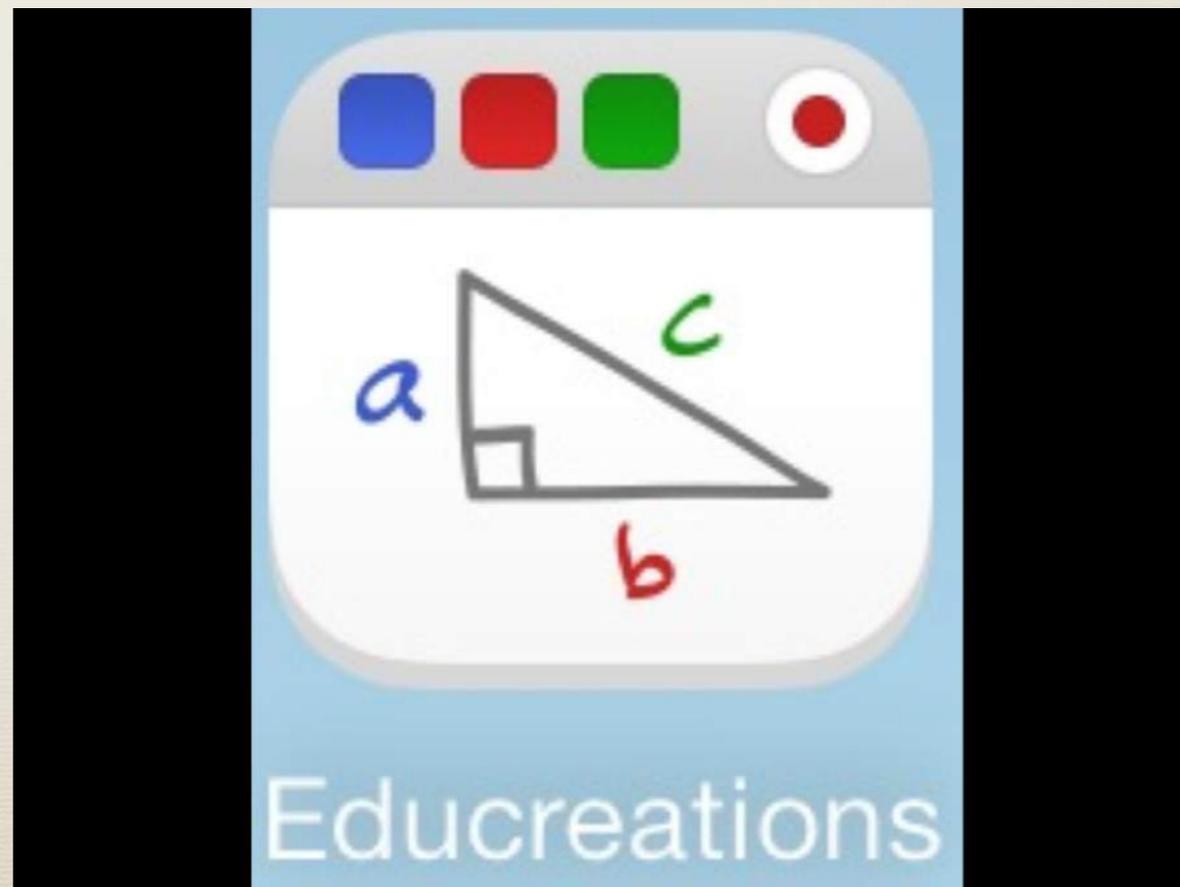


Why did I flip my Algebra 2 class?

- * Tired of spending 25 - 50% of class going over homework.
- * Research has shown an increase in standardized test performance.
- * Reduce math anxiety.
- * Quickly correct student errors and bad math habits.
- * Collaboration and engagement in class.
- * Dense curriculum and difficulty of Algebra 2 Regents Exam.

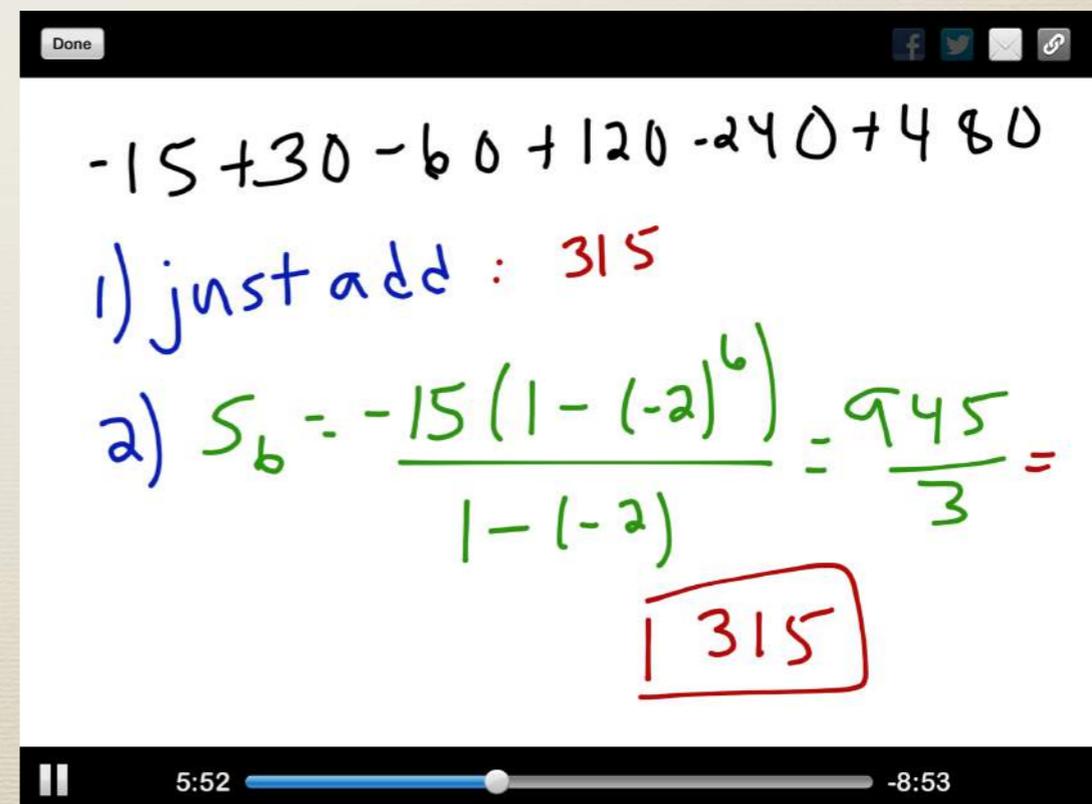
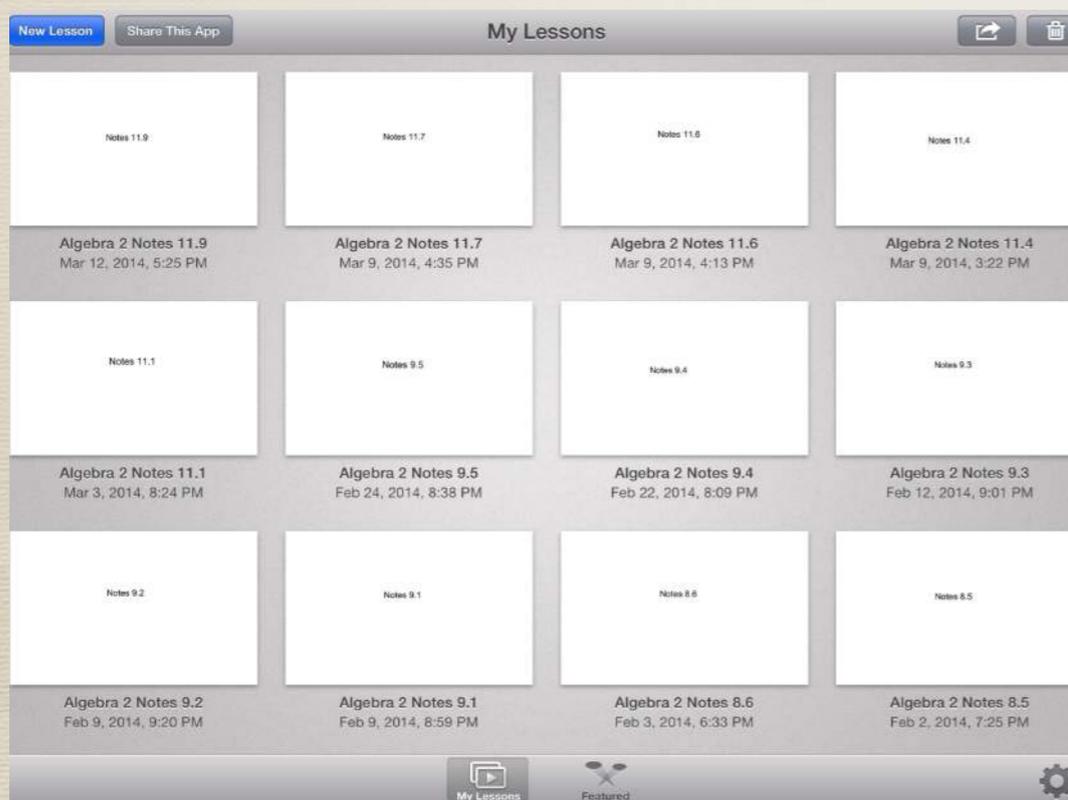
How did I flip my Algebra 2 class?

- * Sharon Springs one-to-one iPad initiative.
- * Created lecture videos on a whiteboard app called Educreations.



The Videos

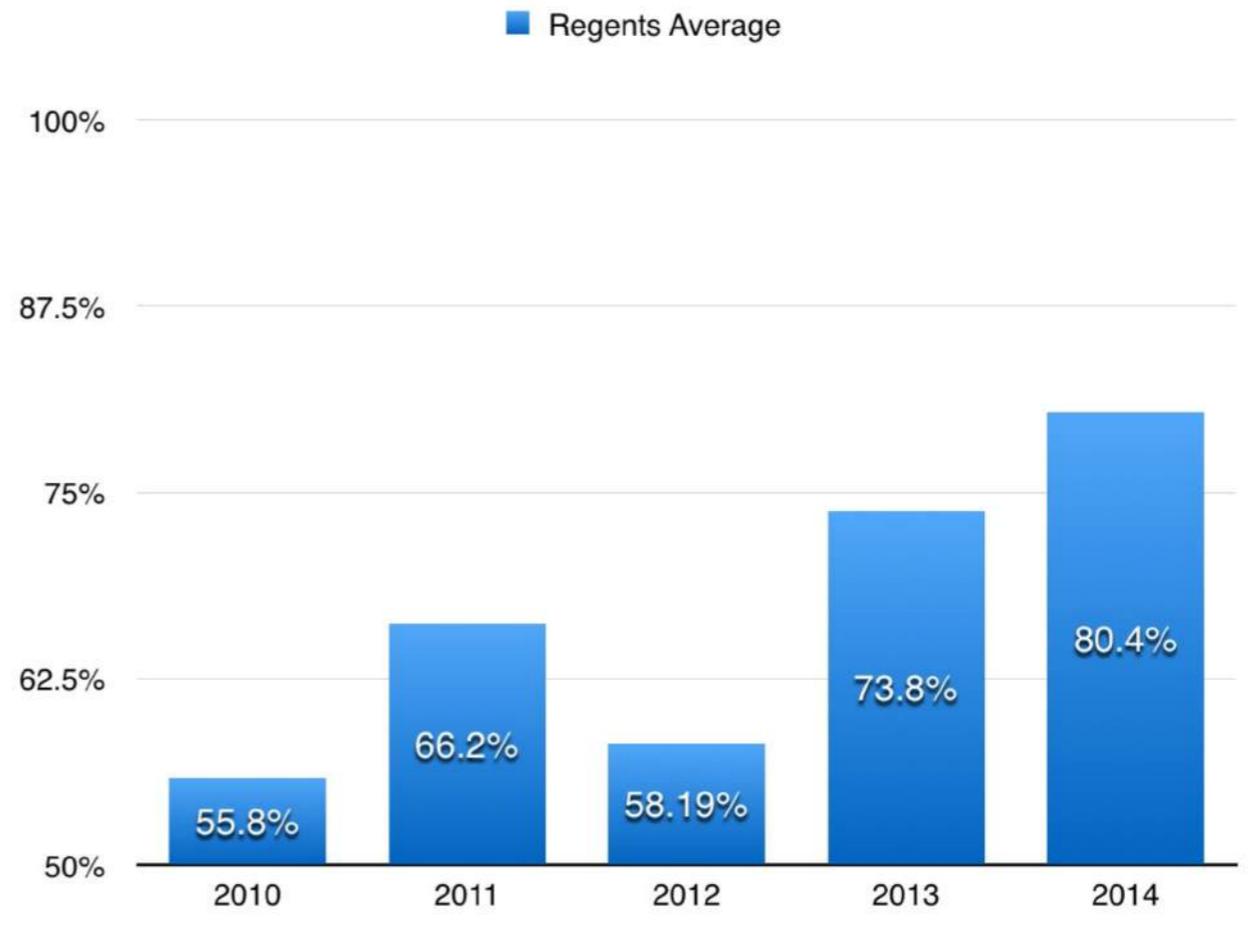
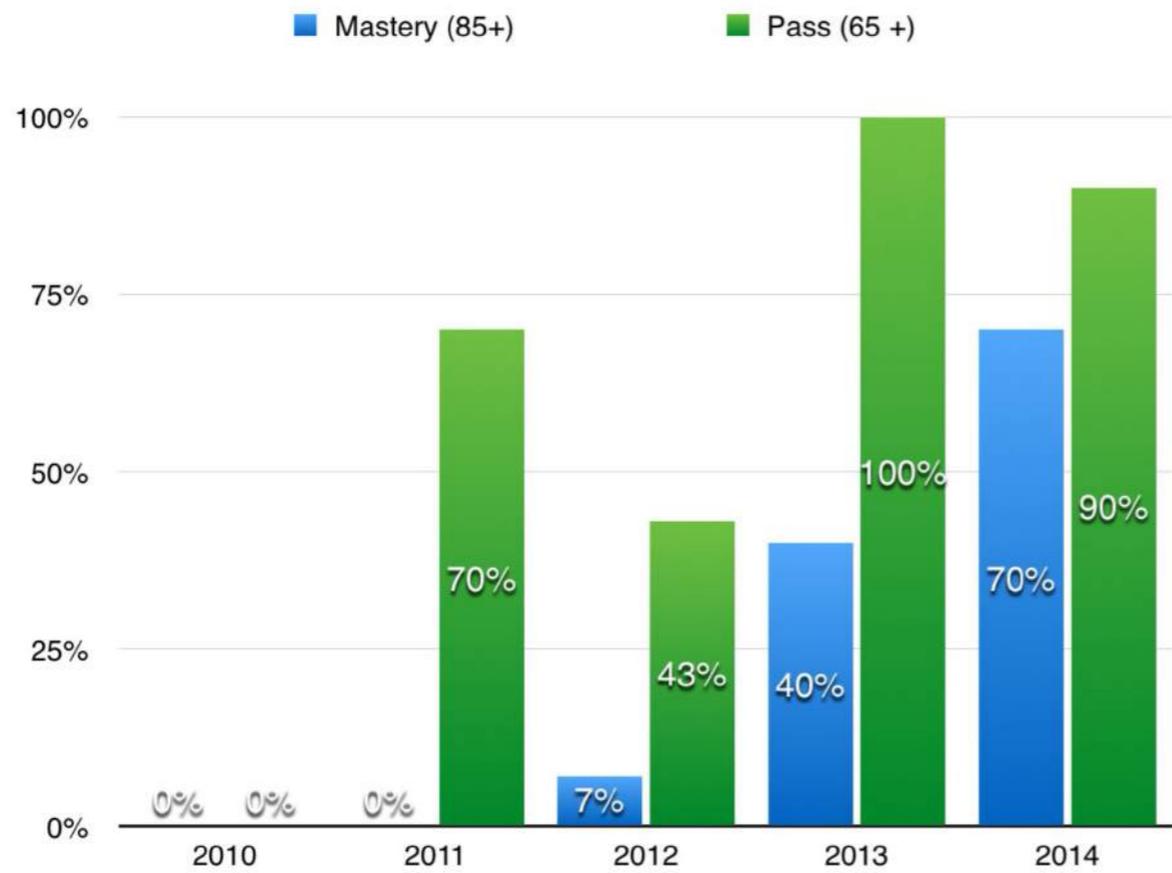
- * 5 - 15 minutes on average.
- * Guided notes.
- * Graded as a homework assignment.
- * Shared on a learning management system called My Big Campus.



The Classwork

- * Traditional textbook assignment.
- * Work collaboratively or individually.
- * Instant feedback.
- * One to one tutoring.
- * Classwork assignments are graded.

Does it work?

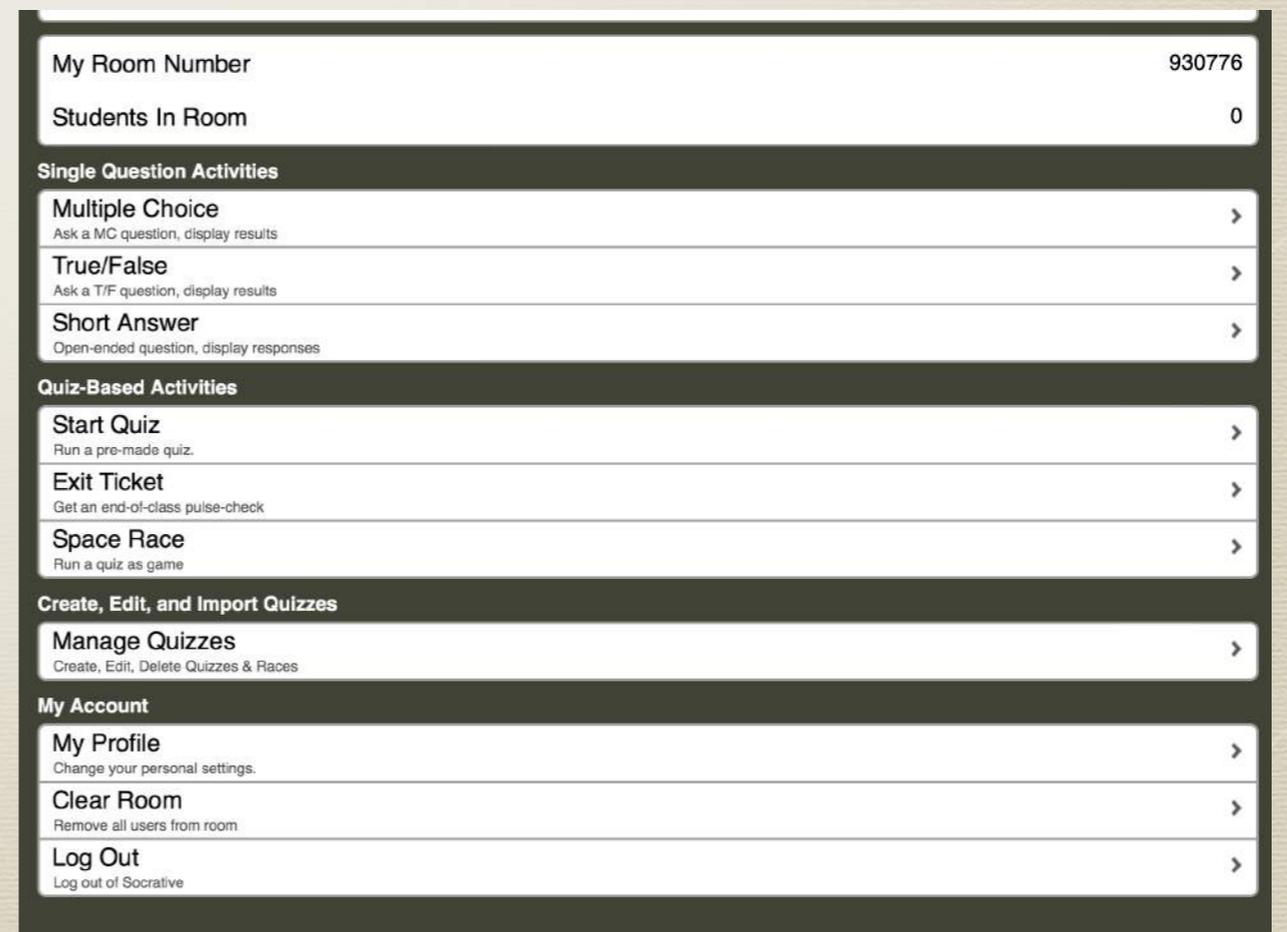
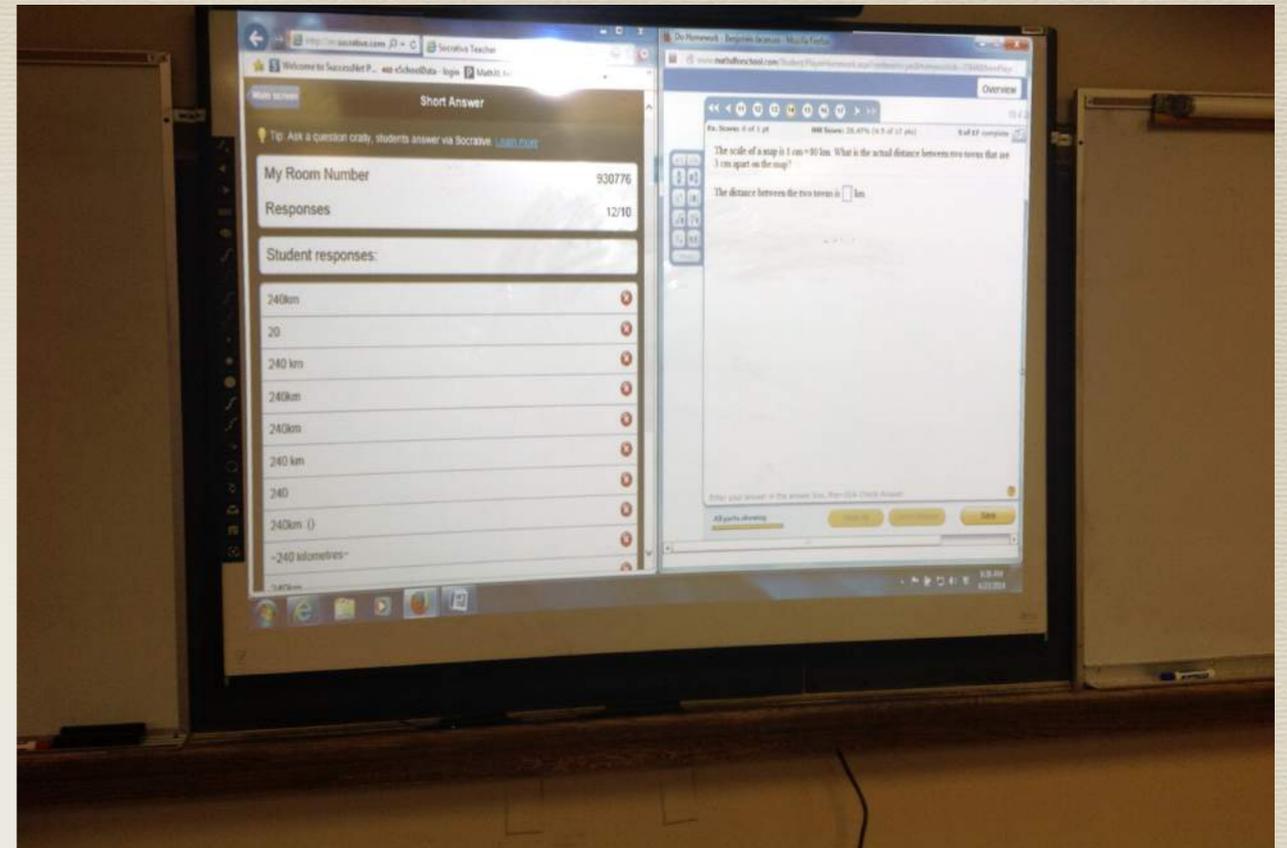


Students' Voice

- * I liked it because the homework (videos) were short and easy. When you did assignments in class, the teacher could explain it to you as you were doing it yourself, making learning easier.
- * I thought it was a great way to learn the material. While learning Algebra II / Trig, I had several questions that I was able to ask in class.
- * I liked that we did so many practice problems and could ask a lot of questions. The material was learned with limited take-home homework.
- * I liked that if I missed something in the video, or didn't understand it, I could go back and re-watch the video or ask the teacher for help in class.

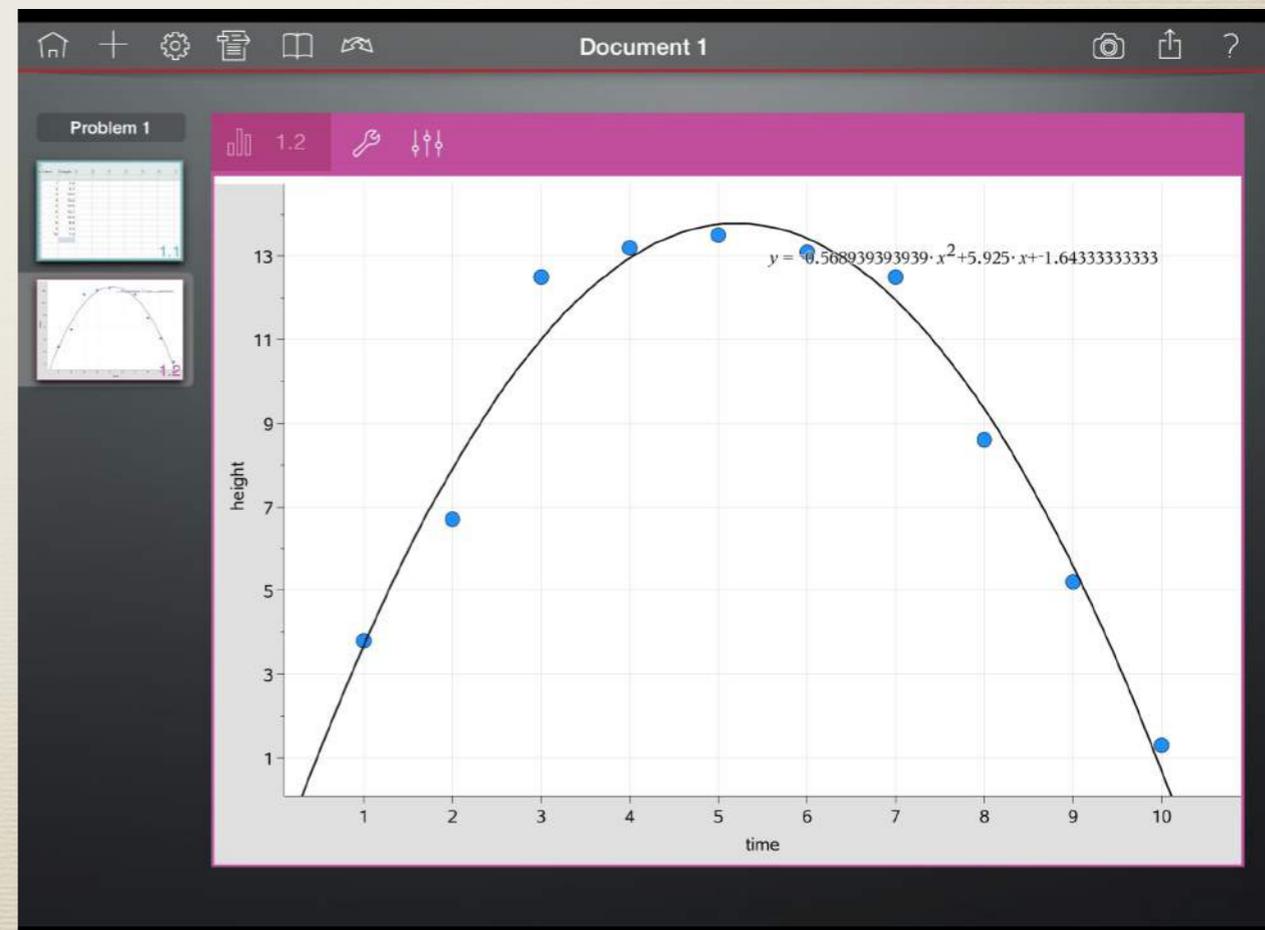
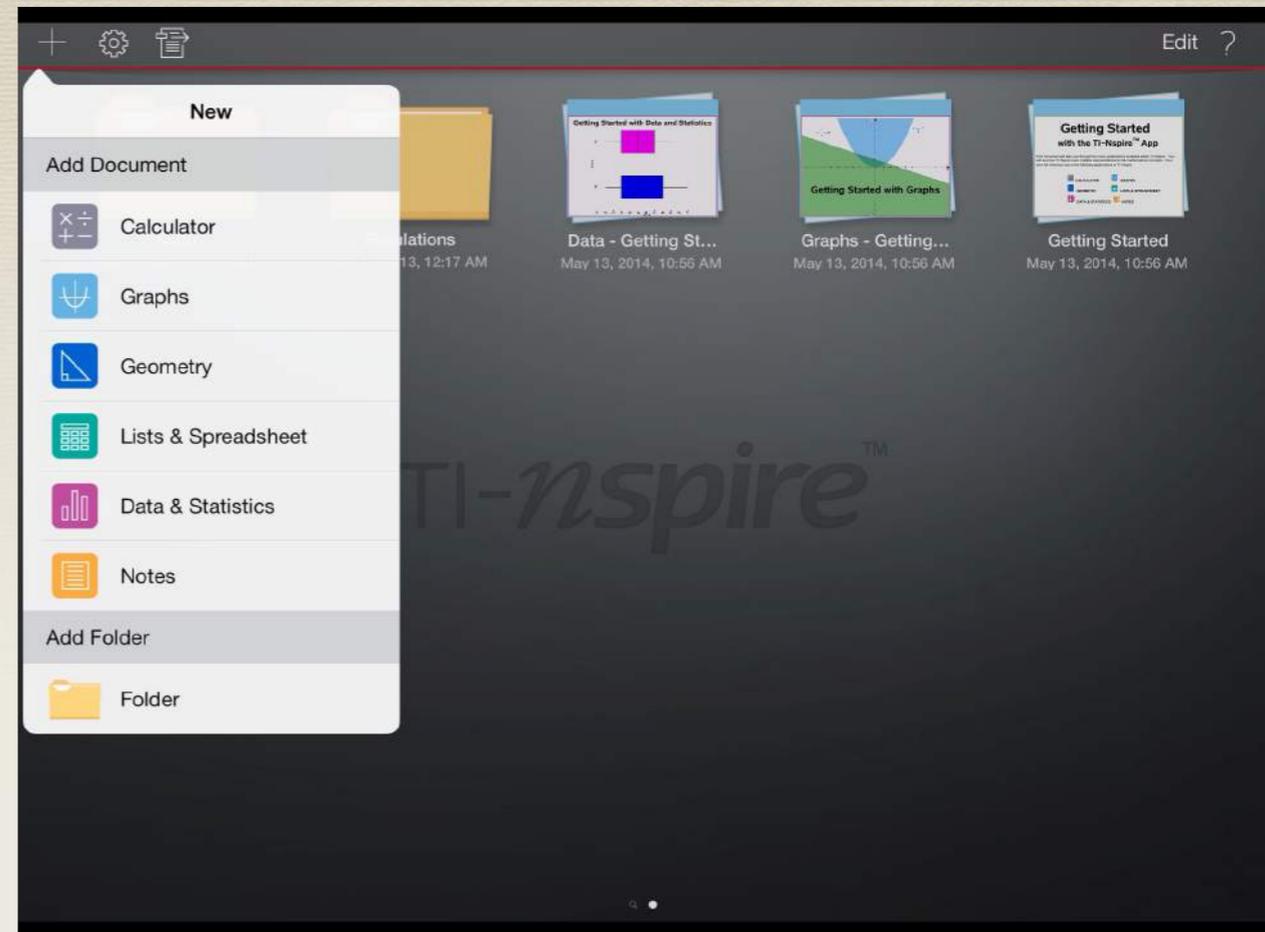
Socrative App

- * Student response system.
- * Compatible with tablets and laptops.
- * Everyone participates.
- * "I like this app because it gives every student the chance to think and then answer."



TI-Nspire Calculator

- * Highly interactive graphing calculator.
- * Access for all students.
- * Affordability: \$29.99 iTunes versus \$164.99 Amazon.



Electronic Textbooks

- * Introduction Videos.
- * Checkpoints during lessons.
- * Questions with multiple choice answers.
- * Light weight, can't be lost or damaged, always accessible.
- * Text to speech.
- * Can take notes in textbook.



Lesson 9-2 Arithmetic Sequences

Practice and Problem-Solving Exercises

A • Practice

Determine whether each sequence is arithmetic. If so, identify the common difference. SEE PROBLEM 1.

- 7. 10, 20, 30, 40, ...
- 8. 1, 1, 2, 3, 5, 8, ...
- 9. -21, -18, -15, -12, ...
- 10. 97, 86, 75, 64, ...
- 11. 3, 7, 11, 15, ...
- 12. 100, 10, 1, 0.1, ...

Find the 32nd term of each sequence. SEE PROBLEM 2.

- 13. 34, 37, 40, 43, ...
- 14. -9, -8.7, -8.4, ...
- 15. 23, 30, 37, 44, ...
- 16. 9, 4, -1, -6, -11, ...
- 17. 0.1, 0.5, 0.9, 1.3, ...
- 18. 101, 105, 109, 113, ...

Find the missing term of each arithmetic sequence. SEE PROBLEM 3.

- 19. -15, ■, 1, ...
- 20. 14, ■, 28, ...
- 21. ... 5, ■, 21, ...
- 22. ... 98, ■, 66, ...
- 23. 25, ■, -10, ...
- 24. ... 65, ■, -60, ...

- 25. **Savings** A student deposits the same amount of money into her bank account each week. At the end of the second week, she has \$30 in her account. At the end of the third week, she has \$45 in her account. How much will she have in her bank account at the end of the ninth week? SEE PROBLEM 4.

Effectively Integrating Mobile Technology Requires

- Commitment to growth from administration, teachers, and community.
- Resources to support that commitment.
- Ongoing, quality professional development.
- In essence, our success has been built upon a culture of trust through collaboration; where teachers were not forced to use specific tools but were given the conditions to grow and add technology according to their professional judgement.



Sharon Springs Central School's Superintendent & Principal: Patterson Green



Administating SSCS's 1:1
iPad Initiative
June 2012-2014



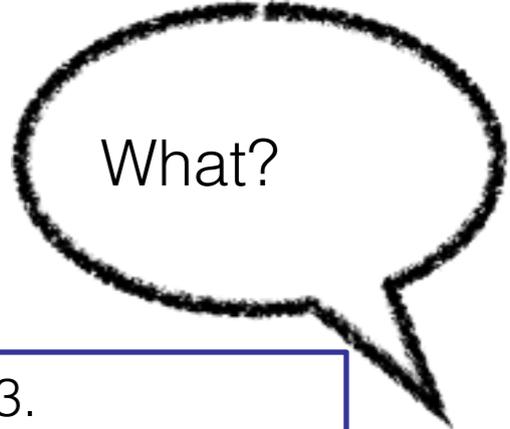
Goals of SSCS iPad Project:



- Equity: Promoting equal opportunity and providing meaningful access to learning technology resources for all students, including those who are economically disadvantaged or have special needs. We are at 58% Free and Reduced Lunch with a high percentage of students do not have access to technology resources outside of the school day. According to a survey, less than 50% of our homes have internet access, some of which include dial up.
- Engagement: Involving students in active learning and thereby improving student achievement by engaging them with technology from their own generation.



2012 Rollout



What?

- All Teachers (June) and Students Grade 7-12 were issued an iPad 3.
- Internet to the iPad continues to be provided by Verizon Wireless, allowing for mobile access.
- Internet content is filtered by LightSpeed in accord with the Children's Internet Protection Act (CIPA) and local policies.
- Each iPad was fitted with a durable OtterBox case and AppleCare Plus insurance.
- Students have been issued an individual school based e-mail address (user@sharonsprings.org).
- Applications provided are Pages (Word), Numbers (Excel), and Keynotes (PowerPoint), iPhoto and iMovie.
- Textbooks and novels are be available on the iPad. Students will also have access the BOCES online reading collection through Overdrive. After two years, approximately 73% of our textbooks are now considered e-books.
- Teachers and Students have access to the school districts server storage SSCS Cloud.

The Challenges of Staff Development:

It is important to note that similar to many upstate rural districts, our staff is aging, a fact made more apparent by recent cutbacks;

- 20's- 9%***
- 30's- 23%***
- 40's- 26%***
- Over 50- 42%***

The Challenges of Staff Development:

Like most districts, we use federal title money to fund 4 staff development days throughout the school year. We conducted this PD at the same time as the rollout of the new Common Core and new APPR procedures.

2012-2013

- June Faculty Meeting- Teacher “unboxing” and basic setup of iPads (Badged Apple Trainer)
- Summer- After the teachers had several weeks to begin to learn iPads on their own, a “voluntary” summer session was held relating to “The iPad Classroom” that worked to “fill in the gaps” of basic iPad skills for teachers. (Badged Apple Trainer)
- 9/4/12 Conference Day-iWork suite of apps- Pages, Numbers, and Keynote were emphasized as they support cross-curricular instruction. In addition, training was provided in using iPads for e-Schools for period by period attendance and the new gradebook software. (Badged Apple Trainer)
- January-Using iPads for Project Based Learning (BOCES)
- iPad Apps for Special Education Teachers (BOCES online after school)

All in all, our teachers have been receptive to learning ways to utilize the iPads in their respective classes to one degree or another.

A. The understanding that it will lead to increased student engagement and thus an increase in student achievement.

B. APPR – Both the **Danielson 2013 Rubric** and the **NYSUT Teacher Practice Rubric** emphasize “cognitive engagement,” “constructivist learning,” and “21st Century Skills.”

Other key elements include; “student collaboration,” “critical thinking,” “technology integration,” “student centered activities,” and “authentic problem solving.”

REGENTS RESULTS 2010- 2014

	2010 AVG	2011 AVG	2012 AVG	2013 AVG	2014AVG
Alg 2 - Trig	55.8	66.2	58.19	73.8	80.4
Geometry	63.96	67.4	65.9	74.37	68.8
Integrated Algebra	73.85	74.5	76.23	76.92	76
Comprehensive English	73.41	69.3	80.35	77	79.5
Physics	74.78	77.6	72.2	81.3	73
Chemistry	76	66.3	70.3	74.11	74.53
Earth Science	79.09	80.5	83.3	82.74	82.4
Living Environment	79.91	80.7	84.13	82.5	83.63
US History and Government	80.42	73	72.36	80.28	85
Global History	67.73	71.5	69.72	76.18	75.42

Common Core ELA					75.1
Common Core Algebra					69.6

Source: Assessment Scoring and Analysis Program with NERIC



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