

### **Daniel Boone School Demographics**

- Multiple Languages: Over 20 different home/native languages (41.1% ELLs)
- Different Socioeconomic Backgrounds: 89.4% low-income students
- Diverse Learning Styles: Students with IEPs (Special Education) and non-English speakers receive instruction in the general classroom setting

### **Targeted Population**

iPads implemented during instruction with about 160 students during their 7th and 8th grade Science and Language Arts classes

## **IPADS HAVE TRANSFORMED ARCHAIC CLASSROOMS INTO 21st CENTURY LEARNING COMMUNITIES BY INCREASING...**

### **Collaboration**

- *Archaic Learning*: No structured means for sharing. Literature discussions were conducted orally and dominated by one student or teacher.
- *21st Century Learning*: *Edmodo Discussion Boards* enable students to merge diverse ideas and create a common understanding.
  - Posting enables *all students* to share their unique thinking and inferences *simultaneously* during learning.
  - Students have increased their ability to dialogue in writing about their understanding of text and content.

### **Communication**

- *Archaic Learning*: Attainment and assessment of information limited to textbooks, worksheets, lecture and paper-pencil activities.
- *21st Century Learning*: Students with diverse learning style have multiple formats to attain and communicate their learning. Teachers can now see into the minds of their students, assess understanding and clarify misconceptions.
  - *iBooks*: The post-it notes of Harvey & Goudvis' (*Strategies that Work*, 2000) brought to life! Students digitally apply reading strategies to highlight main ideas and create notes on inferences, conclusions and predictions.
  - *Show Me/ Educreation*: Students communicate individual understanding while improving verbal skills.
  - *Pages*: Writing can now be posted to share with an authentic audience.
  - *Keynote*: Students no longer read from a paper but build presentation skills by supplementing work with visuals and recordings.
  - *Built-in Video/Camera*: Literature discussions, peer conferencing and readers theater recorded and shared for continued improvement.

### **Critical Thinking**

- *Archaic Learning*: Instruction involved science textbooks with little non-fiction content reading, teacher-created questions & organizers. Student-created questions were low-level with no real format for sharing with peers.
- *21st Century Learning*:
  - With increased access to information, more inquiry skills have been embedded into our curriculum. Thus, students are better able to guide their own dialogue by asking high-order QAR thinking questions that build on others' ideas.
  - Learning enriched through access to online sources and teacher-created ePubs.
  - Access to more than one source improves their ability to synthesize, compare and evaluate information.
  - Students now *apply* knowledge by creating their own graphic organizers on *iBrainstorm*, *Popplet* and *Screen Chomp*.

MY IPAD

Creativity

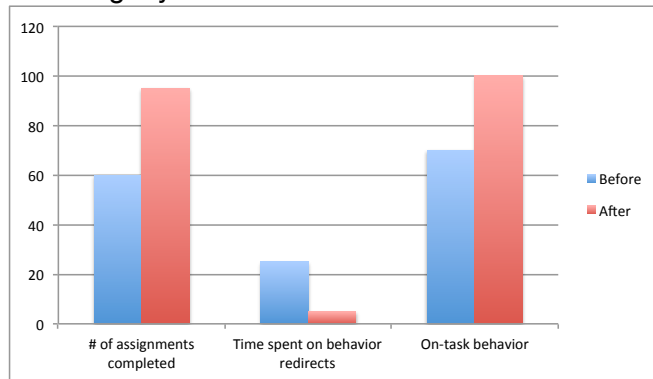
- *Archaic Learning*: Construction paper, glue, markers and maybe glitter.
- *21st Century Learning*:
  - *Video and Creativity Apps* engage students in project-based learning as they express their ideas

Student Engagement and Amount of Time on Task

- *Archaic Learning*: One hour class period resulted in 8-10 behavior redirects. Discipline interfered with teaching time as students had little intrinsic motivation.
- *21st Century Learning*:
  - Quiet Classrooms! Active engagement in learning! One hour class period results in 0-2 behavior redirects.
  - Students eager to grab their iPads and ask for more work-time.

Student Ownership of Learning

- *Archaic Learning*: Missing assignments, distracted students, messy work that demonstrated little pride but a “hand something in” attitude.
- *21st Century Learning*:
  - New attitude of “doing my best!”

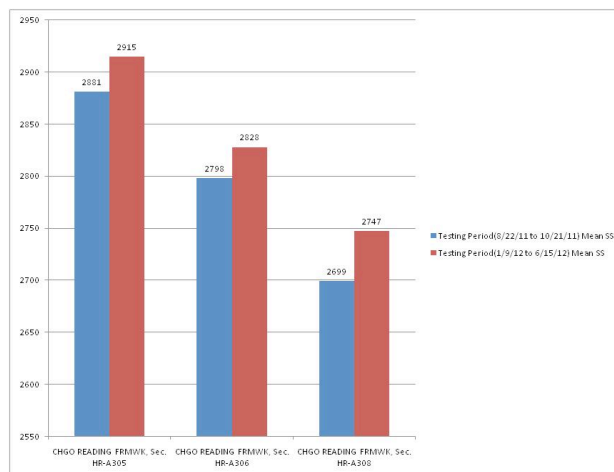


- Instantaneous feedback encourages students to improve their performance.
- Access to authentic audiences motivates students to show their best.

Teacher Assessment

- *Archaic Learning*: Teachers waiting a day or week to assess student understanding and clarify misconceptions.
- *21st Century Learning*:
  - *Instantaneous* feedback through online polls, discussion boards and quizzes.

Scantron Assessment Results



## MY WORLD

### MY IPAD

DANIEL BOONE SCHOOL

6710 N Washtenaw, Chicago

Despite not enough instructional minutes, Scantron scores from fall to spring show increases in all classroom settings .

#### **Student Accessibility: Increased ability to differentiate within our diverse school population**

- *Archaic Learning*: ELLs that could not understand lectures or text in English. Students with special needs all receiving the same modification.
- *21st Century Learning*:
  - Ability to translate text and access content in a specific language or reading level.
  - Options to gain knowledge through audio or video means.
  - Opportunities to review and reinforce with *digital recording of lessons, Flashcards, Build a Body, Simple Physics, Cell Stain etc...*