Technology and
The Next Generation Learning Standards

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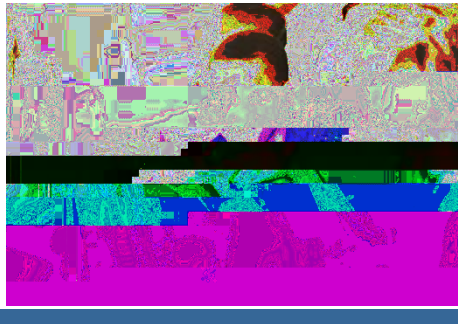
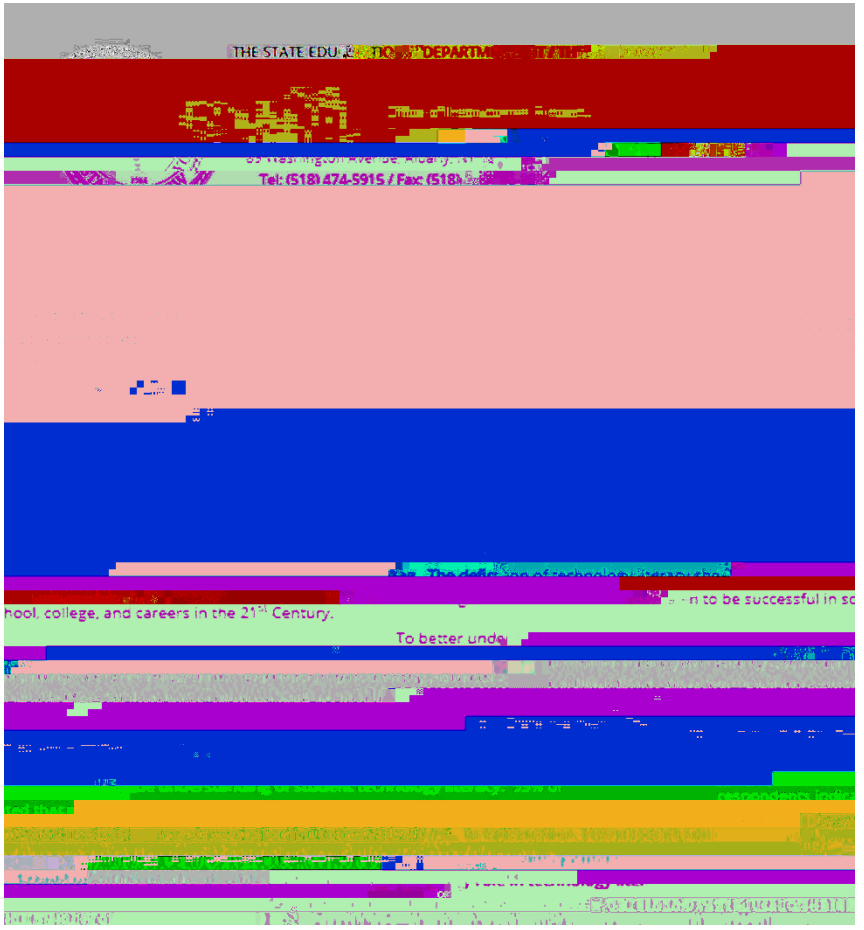
Agenda



- Overview of Connections between Standards and Technology
- Keyboarding Instruction
- District Spotlight: Akron CSD
- Leadership: Implementing Personalized Learning with Technology
- Wrap Up and Questions

Technology in NYS Schools

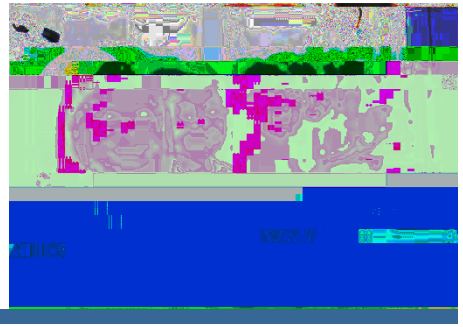
- Technology is a powerful tool, and should be utilized in everyday instruction, across all subjects, to enhance teaching and learning.



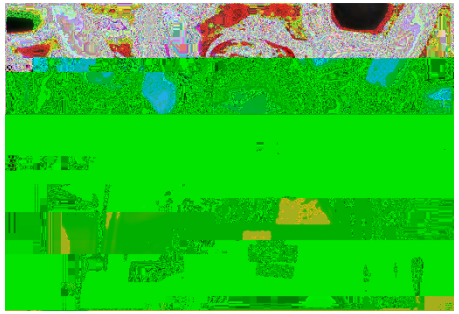
Takeaways from this Morning

- The “What” and the “How” (and how technology fits in)
- Follow a student
  - Voice
  - Engagement
  - Individual needs
  -
    -

Technology and Mathematics

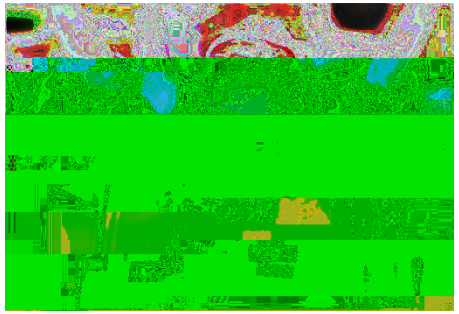


- Today's children live in a society where
  - many of their peers are from diverse backgrounds and speak different languages
  -

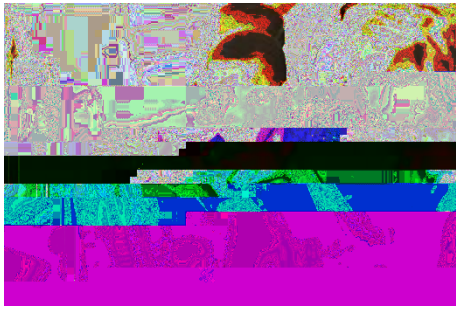


Technology in MS Math Standards

NY-7.G Ge4poBtry



Technology in HS Math Standards



AI-A.REI Algebra - Reasoning with Equations and Inequalities

- Given the equations y = f(x) and y = g(x):
- ii) find the solutions approximately using technology to graph the functions or make tables of values

AI-F.IF Algebra - Interpreting Functions

- 7. Graph functions and show key features of the graph by hand and by using technology where appropriate. t

AI-F.BF Algebra - Building Functions

- 3a. Using f(x) + k, k f(x), and f(x + k):
- iv) use technology to experiment with cases and explore the effects on the graph.

AI-S.ID Statistics and Probability

- 8. Calculate (using technology) and interpret the correlation coefficient of a linear fit.

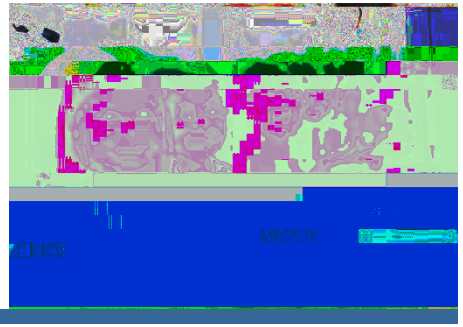
Technology in HS Geometry

Literacy for History/SS, Science, and Technical Subjects

What is Literacy?

A high degree of proficiency in literacy is essential as students attempt to acquire and build knowledge in each of the content areas. Students must be able to read social studies textbooks, analyze historical documents, follow scientific procedures, and discuss complex written problems, as well as respond to issues in their subject area content through speaking, writing, and crafting digital responses.

Literacy for History/SS, Science, and Technical Subjects



What is Literacy?

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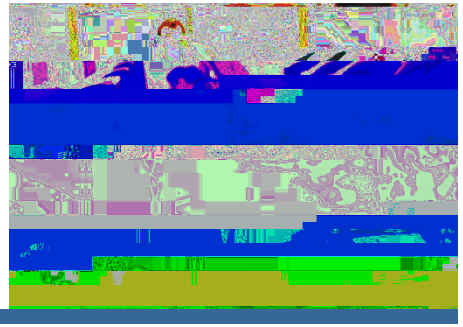
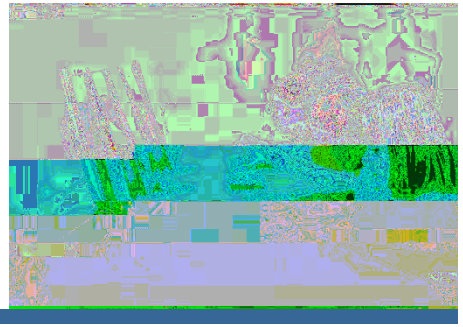
Reading Standard 7: H/SS



- 6-8: Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- 9-10: Integrate and evaluate visual and technical information (e.g., in research data, charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- 11-12: Integrate and evaluate multiple sources of information presented in diverse formats and media

Reading Standard 7: ST



- 6-8: Identify and match scientific or technical information presented as text with a version of that information presented visually (e.g., in a flowchart, diagram, model, graph, or table).
- 9-10: Translate scientific or technical information expressed as written text into visual form (e.g., a table or chart), and translate information expressed visually or mathematically (e.g., in an equation) into words.
- 11-12: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

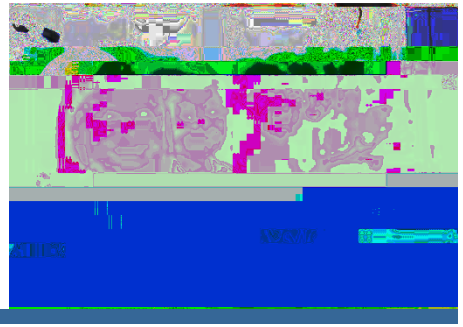
Range of Text Types

- Informational Text in both print and digital sources
- Discipline-specific material, including
  - Blogs/websites
  - Texts written by members of a discipline community for others in that community, such as articles appearing in professional journals and on the websites of professional organizations

ELA Introduction

The rate at which knowledge is generating and shared today, often via technology , is unprecedented in human history... Today's children must also become adults who are able to communicate and navigate an increasingly interconnected society —one in which literacy skills are routinely called upon. In other words, all students in NYS classrooms must develop advanced literacies. Advanced literacies denote a set of skills and competencies that enable communication, spoken and written, in increasingly diverse ways and with increasingly diverse audiences .

ELA Introduction: Additional Guidelines



- The development of all literacy skills requires extensive opportunities to practice, especially with authentic texts and real-life communication situations , including authentic social, cultural, professional, and academic contexts.
- The standards address a student's ability to read, listen to, and view creative works in various genres and across various cultures. In addition to acquiring knowledge about the history, forms, and artistic craft of the works studied, students are expected to develop informed written, spoken, visual, and digital responses .
- The word "text" should be construed as encompassing far more than printed material. Text may also refer to speech, graphics, visual art, digital representations, video, and other visual and audio depictions of ideas, concepts, and experiences.