

Assistive Technology: Supporting Student Learning and Improving Access to the Curriculum



AAESQ/QESBA Spring Conference

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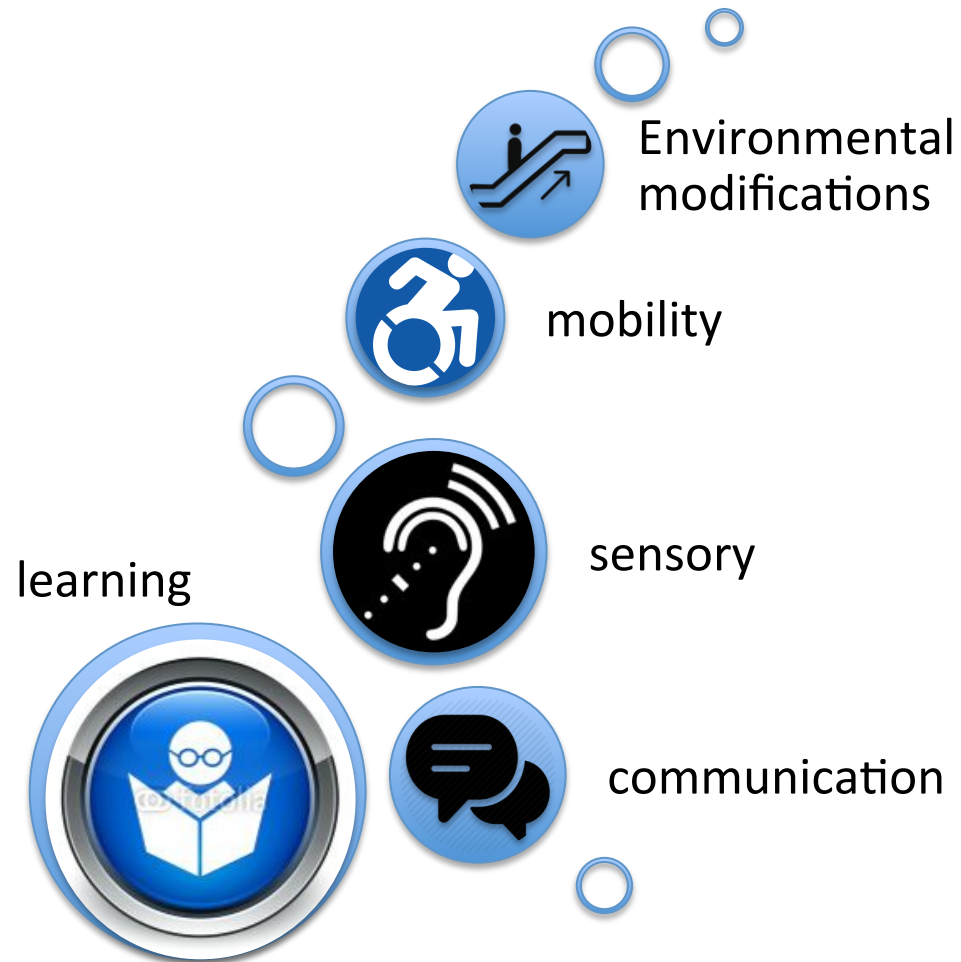
Our discussion today

- What is assistive technology (AT) ?
- Making a case for assistive technologies in our schools
- Virtual tour
- Frameworks for selection and implementation of AT

What is assistive technology or “AT”?

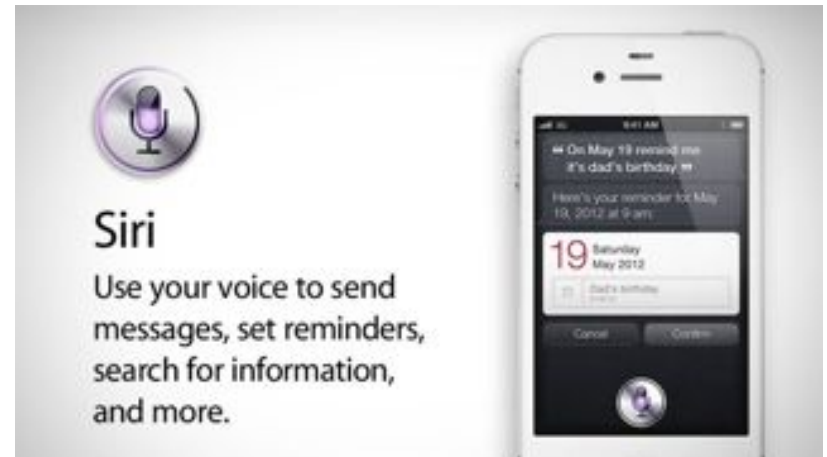


AT categories

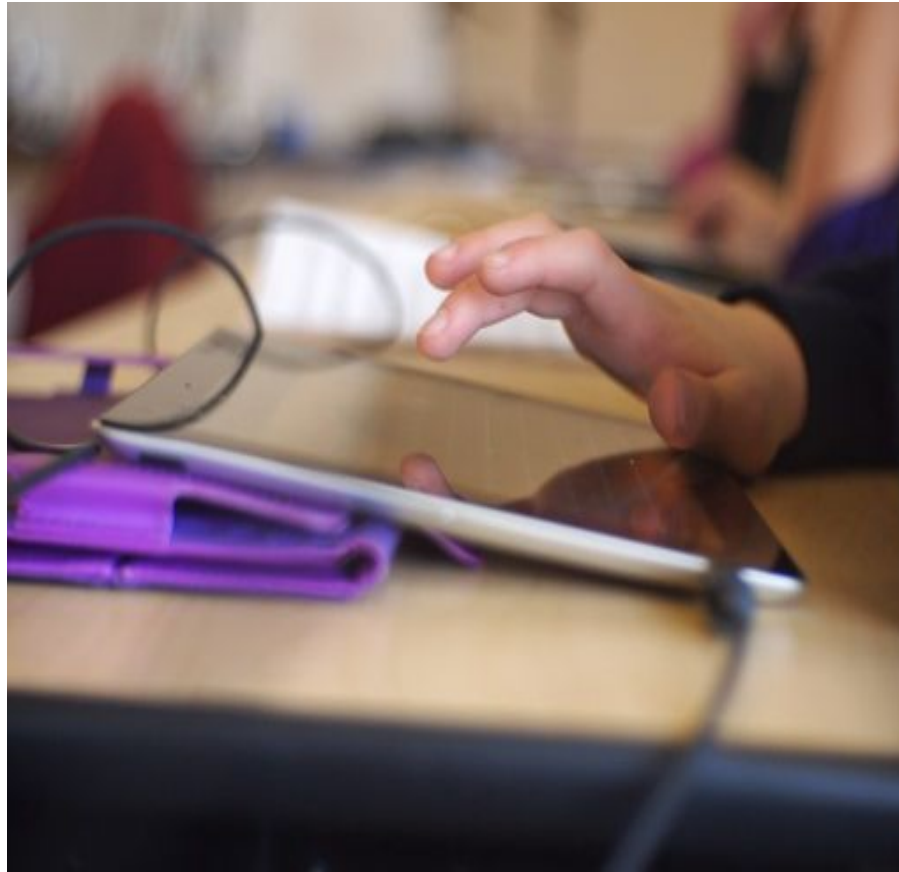


The Evolution of AT for Learning

- Yesterday's assistive technology is...
today's everyday classroom technology.



Making the case for assistive technologies in our schools



Who are our students?

Student diversity means:

- Differences in learning style
- Differences in background knowledge and experience
- Differences in learning preference
- Differences in interests and motivation



"I use drugs/alcohol"



"It's too hard"



"I'm bored"



"I don't fit in"



"I can't handle it"



"I'm bullied"



"I'd rather work"
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What can we do to support diversity?

- Implement **flexible ways of teaching and learning** so that students with varying abilities and strengths can learn together.
- Provide students with opportunities for **improved access** to the curriculum by reducing barriers.

Use of assistive technology in the classroom
makes it easier to reduce barriers.

Of great significance to students with special needs, is the **flexibility** of digital media.

(Rose and Meyer, 2002).



For people without disabilities, technology makes things easier. For people with disabilities, technology makes things possible.

ibm training manual 1991

How is AT supporting our students?

A virtual tour



Common categories of AT in our schools

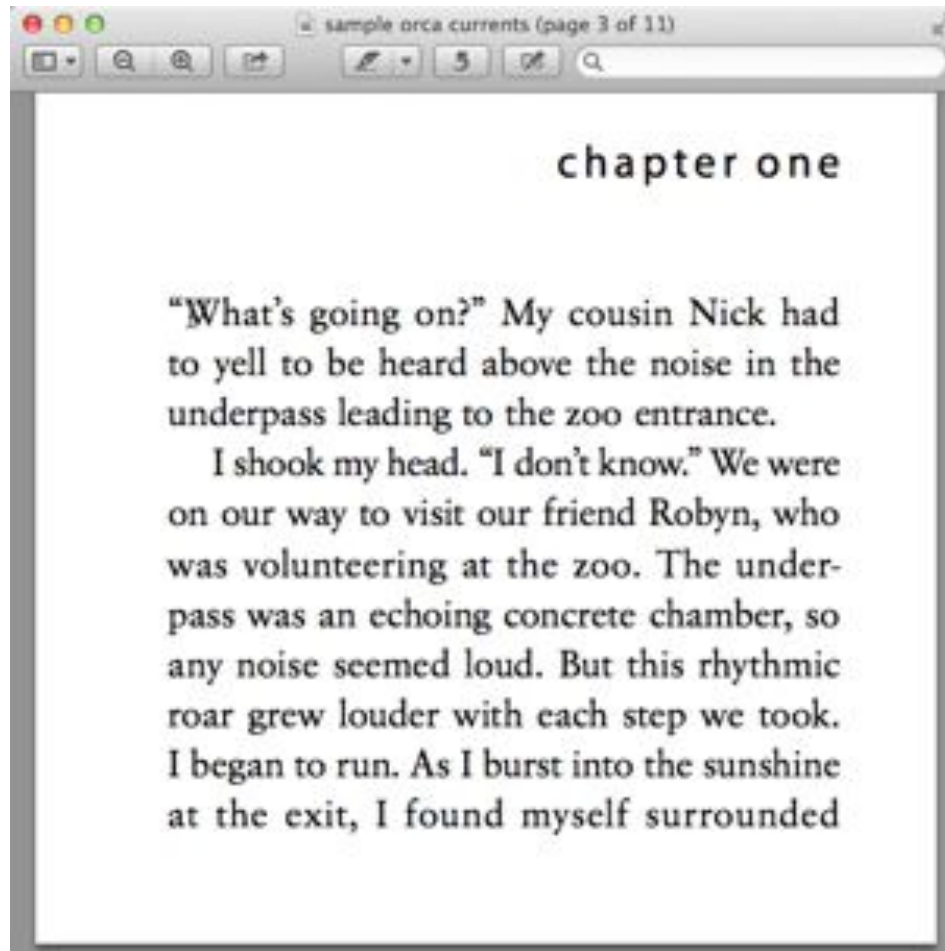
- Literacy support (reading, writing)
- Productivity/organization
- Communication support (augmentative and alternative communication)
- Social skills support
- Screencasting as a support for instruction

How do these tools *support* students? How do they provide *improved access* to the curriculum?

Literacy support

- Text to speech
- Word prediction
- Optical Character Recognition (OCR)
- Graphic organizers or concept mapping

Text to speech

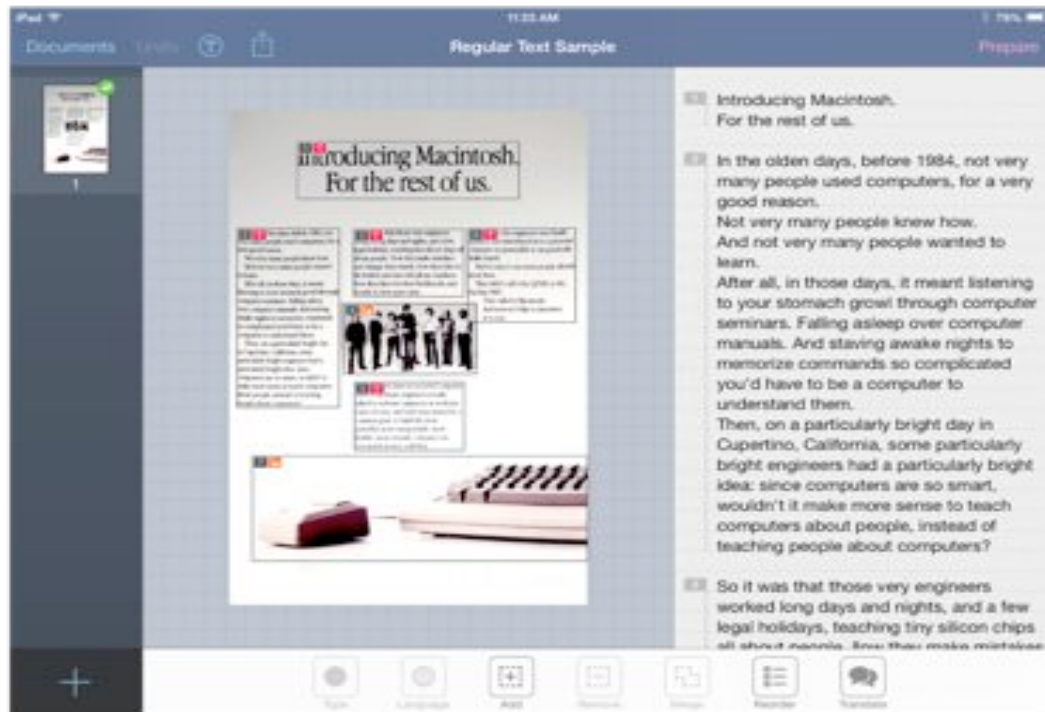


Word prediction

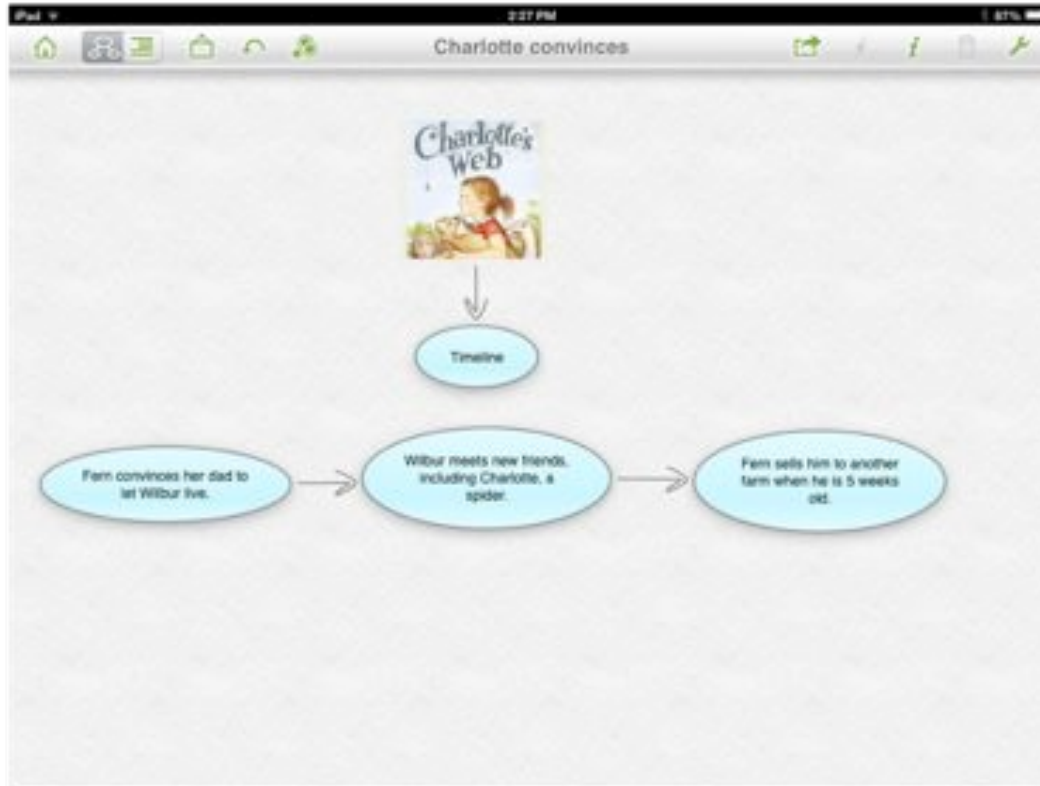


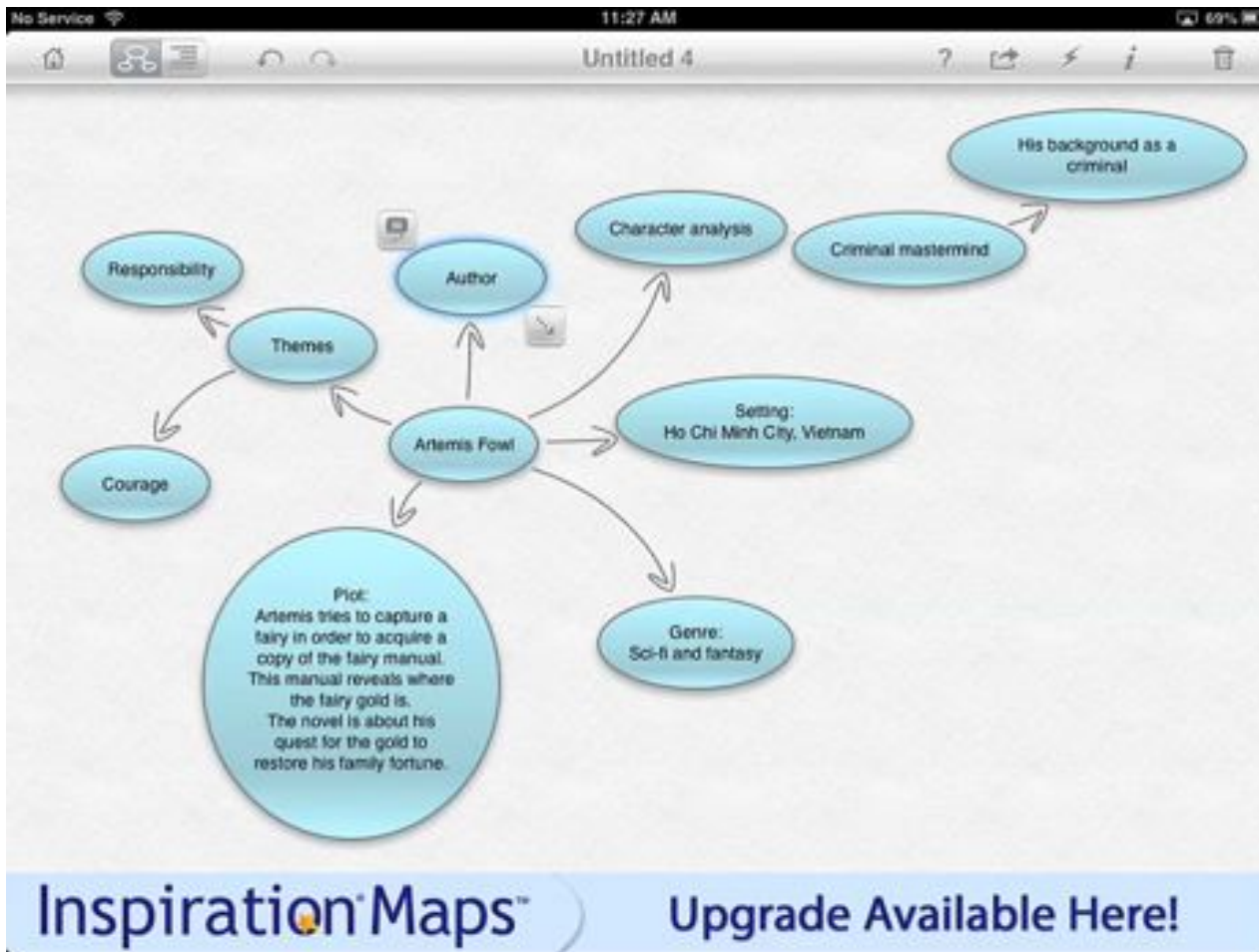


Optical character recognition (OCR)

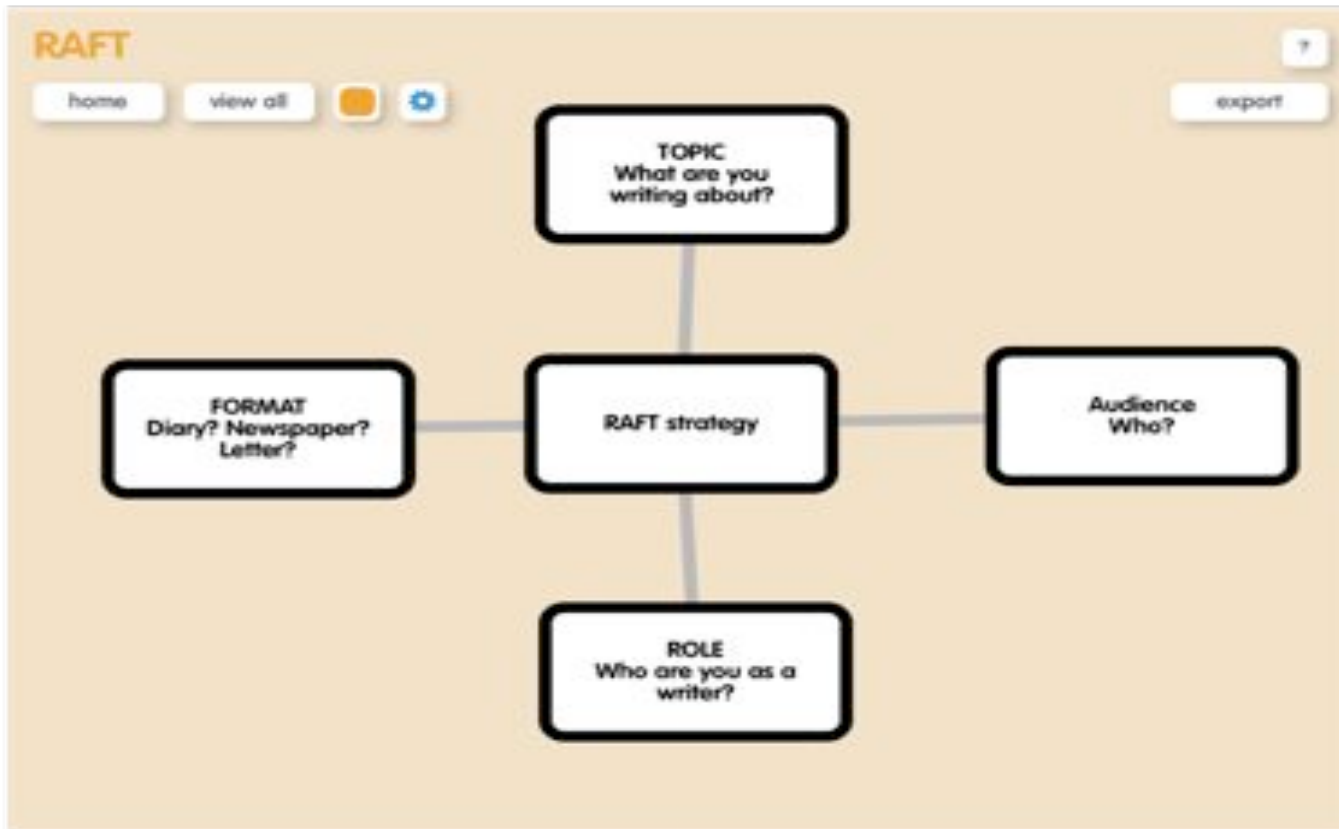


Graphic Organizers









Productivity/Organization

- Notetaking/project management/research skills
- Annotation

Notetaking/project management/research skills

The screenshot shows a mobile browser interface with a status bar at the top displaying "No Service", "10:55 PM", and "20%". The page title is "Remembrance Day" with a timestamp of "Oct 29, 2013, 12:09 PM". The main heading is "The battle of Vimy Ridge". Below this, a text block reads: "This is the poppy. It symbolizes the 1000s of men and women who lost their lives in military service. 'In Flanders field the poppies grow...John McCree, 1915". A green arrow points from this text to a photograph of a red poppy with a small Canadian flag in its center. Below the text is a map of the battle site with a green arrow pointing to it from the text "[Click the map for a larger version!]". A purple arrow points from the map to a photograph of the Vimy Memorial, which is a large stone structure with the text "VIMY APRIL 9 AVRIL 1917" and a Canadian flag at its base. At the bottom of the page, the text reads: "The battle of Vimy Ridge began on Easter Monday April 1917. 10,000 Canadian casualties".

Annotation



$$4x + 3 = 19$$

Subtract both sides by 3

$$\begin{array}{r} -3 \\ -3 \end{array}$$

$$4x = 16$$

Divide both sides by 4

$$\begin{array}{r} /4 \\ /4 \end{array}$$

$$x = 4$$



This listening term project counts as a test grade.
Be sure to read and follow all directions.

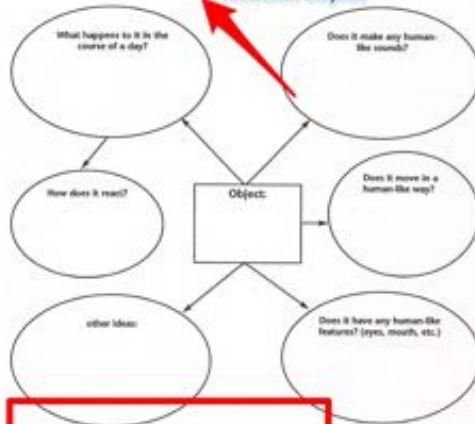
Name _____ Activity #16: Personification

Directions
Decide on a common object—one from the list below or one of your own choosing. Think about some human qualities that could be assigned to this object. Use the graphic below to organize your thoughts, and then write a "personification paragraph" about your choice.

Suggestions:
a ballpoint pen
a soft drink in a can
a floral arrangement
a CD
a tube of toothpaste
a cellular telephone

* You must include one illustration with your paragraph.

I don't have to choose one of these, I can choose another object



Have fun and be creative!

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Call Ella for help 514 264-2243

This is due Wednesday

English homework

Skitch

Augmentative and Alternative Communication (AAC)

Augmentative and Alternative Communication



Social skills

- Social stories

Social stories

Library

Taking Public Transit To Work



Slideshow mode: off

The image shows a blue bus with the route number '165 city-center' and vehicle number '29-011' on its front. A large white play button is centered over the bus. The bus is on a city street with other vehicles and pedestrians visible in the background. The entire scene is framed within a white slide with a brown border, typical of a presentation software interface.

Screencasting

Screencasting

Frameworks for selection and implementation of AT



The best advice...

- Don't start with the AT tool!



Board-wide or school-wide AT plan

- Assessment of student need (as a school)
- Assessment of teacher need
- Training model and sustainability
- Models of integrating assistive technology in the classroom
- IT and environmental considerations
- Evaluation of AT effectiveness
- Individual consideration of specific students

Individual Student Frameworks

The SETT framework provides an organizational structure, tools to help guide teams to be able to make individualized decisions.

(Zabala, J., 2004)

The SETT Framework by Joy Zabala For Considering Assistive Technology

S Student	
E Environment	
T Tasks	
T Tools	

Additional resources for AT selection

- WATI (Wisconsin Assistive Technology Initiative)

Guides for assessment, inclusion of AT in IEP, recommendations, templates

www.wati.org

- SET-BC (Special Education Technology British Columbia)

<http://www.setbc.org>

- QIAT (Quality Indicators for Assistive Technology Services)

http://natri.uky.edu/assoc_projects/qiat/



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