Slide 1

DEER RIVER SCHOOLS

discover learn grow succeed create prepare connect achieve

Transformation!

August 2012

Slide 2

WHY
HOW
WHAT
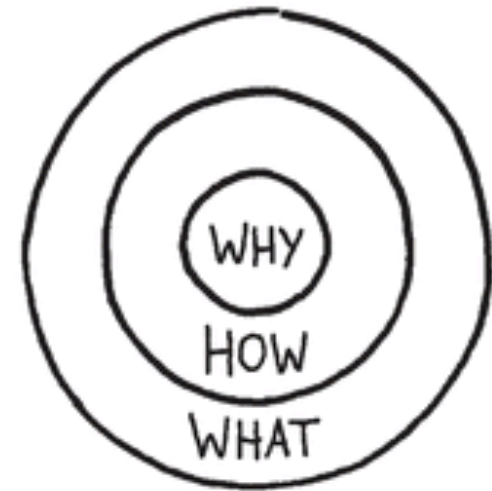
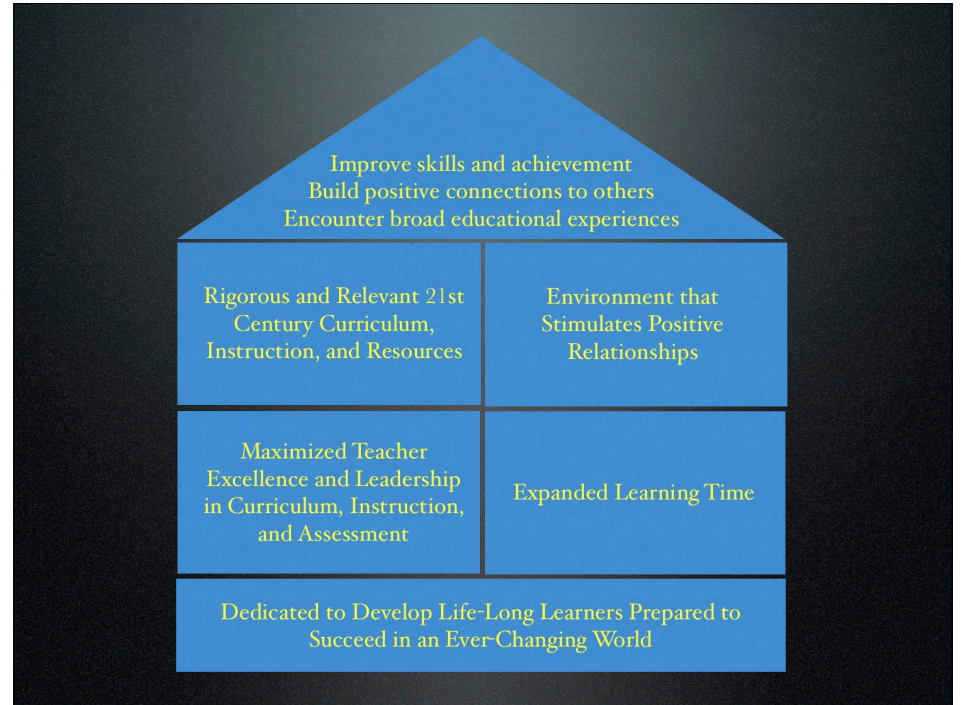# Slide 3

Before we begin...

EVERNOTE®

Slide 4

Looking Ahead...

1. Our Purpose
2. Our Goals
3. Our Expectations
4. Our Commitments

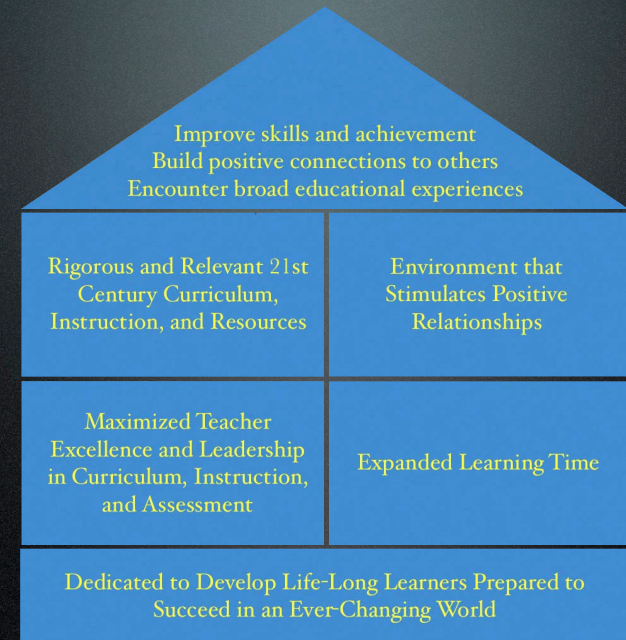$\neq$ App machine

Our Purpose: Why Us, Why Now?

1. It's part of our mission

Improve skills and achievement
Build positive connections to others
Encounter broad educational experiences

Rigorous and Relevant 21st Century Curriculum, Instruction, and Resources	Environment that Stimulates Positive Relationships
Maximized Teacher Excellence and Leadership in Curriculum, Instruction, and Assessment	Expanded Learning Time

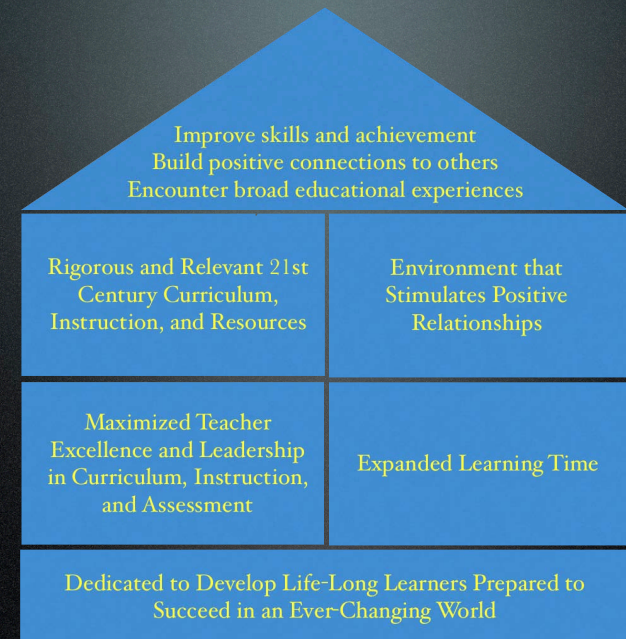Dedicated to Develop Life-Long Learners Prepared to Succeed in an Ever-Changing World

ISD #317
Mission Statement

Dedicated to Develop Life-Long Learners Prepared to Succeed in an Ever-Changing World

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Improve skills and achievement
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Rigorous and Relevant 21st Century Curriculum, Instruction, and Resources	Environment that Stimulates Positive Relationships
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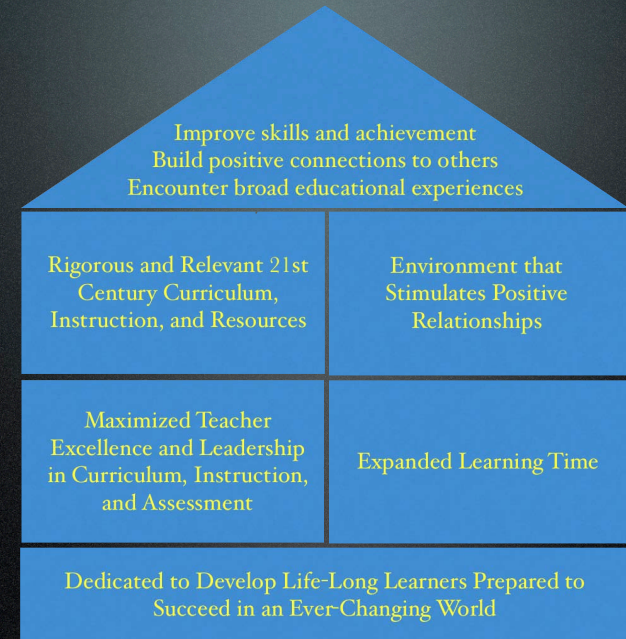
ISD #317
Vision Statement

Improve skills and achievement
Build positive connections to others
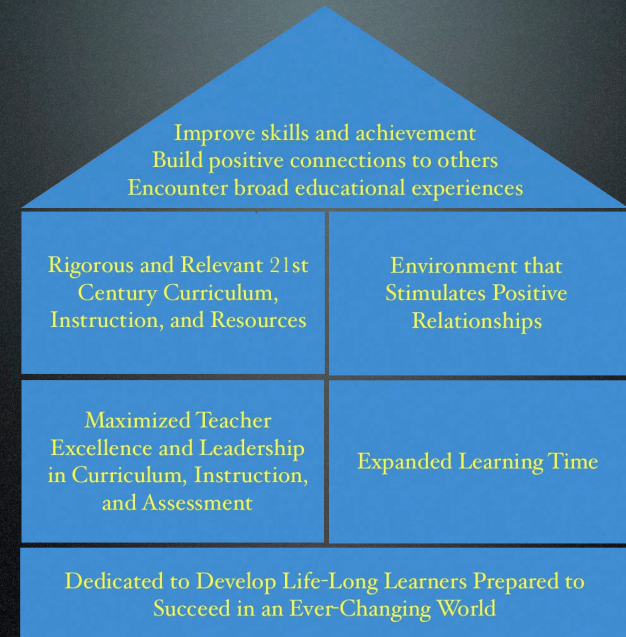Encounter broad educational experiences

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Improve skills and achievement
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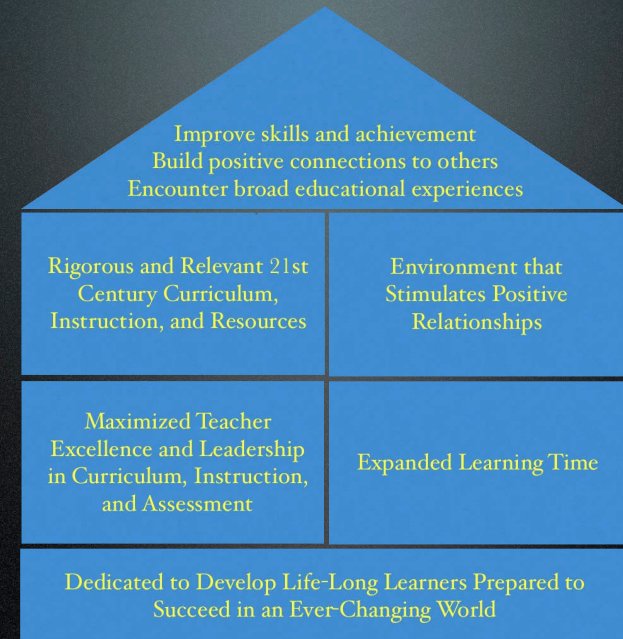| Rigorous and Relevant 21st Century Curriculum, Instruction, and Resources	Environment that Stimulates Positive Relationships
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Dedicated to Develop Life-Long Learners Prepared to Succeed in an Ever-Changing World

Strategy

Rigorous and Relevant 21st Century Curriculum, Instruction, and Resources

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Improve skills and achievement
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Strategy

Environment that Stimulates Positive Relationships

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Strategy

Maximized Teacher Excellence and Leadership in Curriculum, Instruction, and Assessment

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Improve skills and achievement
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Strategy

Expanded Learning Time

Our Purpose: Why Us, Why Now?

2. Our world and our children have changed

Our Purpose: Why Us, Why Now?

1997

- Scientists in Scotland reveal the first successful cloning of an adult mammal a sheep named Dolly

- Microsoft becomes the worlds most valuable company valued at $261 billion dollars

- Microsoft buys minority stake in Apple Computers for $150 million

- ThrustSSC sets the first supersonic land speed record at Black Rock Desert, Nevada at an average speed of 1,227.985 km/h (763.035 mph).

- Mars Pathfinder lands on the surface of Mars

- The first book in the award winning Harry Potter series by J. K. Rowling is published "Harry Potter and the Philosopher's Stone" released in US in 1998 as "Harry Potter and the Sorcerer's Stone"

1999

- The US successfully tests a new anti intercontinental missile defense system

- The year 2000 problem known as the Y2K problem and the millennium bug was the most important thing on most companies minds in 1999

- My Space was officially introduced to the Internet

- Bluetooth announced

- The initial release of Napster

- The genetic code that comprise the euchromatic portion of human chromosome 22 is released into the public domain for the good of mankind

2003

- The Space Shuttle Columbia disintegrates over Texas upon reentry, killing all seven astronauts onboard.

- The highly infectious disease SARS (Severe Acute Respiratory Syndrome) spreads from China, Singapore and Vietnam, Worldwide nearly 9,000 People are effected in 15 countries and over 800 die from the effects.

- Human Genome Project successfully completed with 99% of the human genome sequenced to 99.99% accuracy.

- The space probe Galileo makes a fiery dive into Jupitors atmosphere it was launched in 1989 and is one of the most successful NASA Projects.

2005

- The one billionth song is purchased from Apple iTunes.

- Nintendo releases the Wii in North America with an MSRP of US$249.99

- Google purchases YouTube for US$1.65 billion in stock

- Pluto is downgraded from a Planet to a dwarf planet by The International Astronomical Union (IAU)

Relevance to 21st Century Learner?

2000's

"They hate school. Why? **Education has not caught up** with this new generation of tech-savvy children and teens. It is not that they don't want to learn. They just **learn differently**. Gone are the days when students would sit quietly in class, reading a book or doing a math worksheet. Literally, their minds have changed – they have been "**rewired**." With all the technology that they consume, they *need more* from education. The educational content is not the problem. It is the **delivery method** and the setting. Today's youth thrive on multimedia, multitasking, social environments for every aspect of their lives *except* education."

(Larry D. Rosen, *Rewired,* 2010, p.2)

The iGeners have **redefined communication**. They own cell phones, but use them more for sending text messages than talking. They blog, vlog (using video to transmit information), Twitter, Facebook, MySpace, video chat, share photos, and latch on to and embrace any new communication tool and give it their own personal spin. And they are forcing the older generation to follow suit.

(Larry D. Rosen, *Rewired,* 2010, p.14)

TECHNOLOGY AND MEDIA HOURS/DAY	4 to 8 YEAR OLDS	9 to 12 YEAR OLDS	13 to 15 YEAR OLDS	16 to 18 YEAR OLDS
Online	0:27	0:59	1:58	2:24
On Computer	0:23	0:57	1:44	1:59
E-Mail	0:06	0:26	1:08	1:19
IM/Chat	0:05	0:28	1:24	2:16
Telephone	0:17	0:43	1:07	1:50
Texting	0:07	0:46	2:19	3:32
Video Games	1:32	2:07	1:20	1:17
Music	0:42	1:24	2:49	3:33
Television	1:56	1:56	1:58	2:10
TOTAL DAILY MEDIA & TECHNOLOGY USE	5:35	9:46	15:47	20:20

What should our children be doing in 2012?

21st Century Skills?

The 21st century is 12% over!

Our Purpose: Why Us, Why Now?

3. It's the right thing to do.

"A student from a family in the top income quartile is 10 times more likely to have received a bachelor's degree by age 24 than a student from the bottom quartile."

Postsecondary Education Opportunity, "Family Income and Educational Attainment, 1970 to 2009."
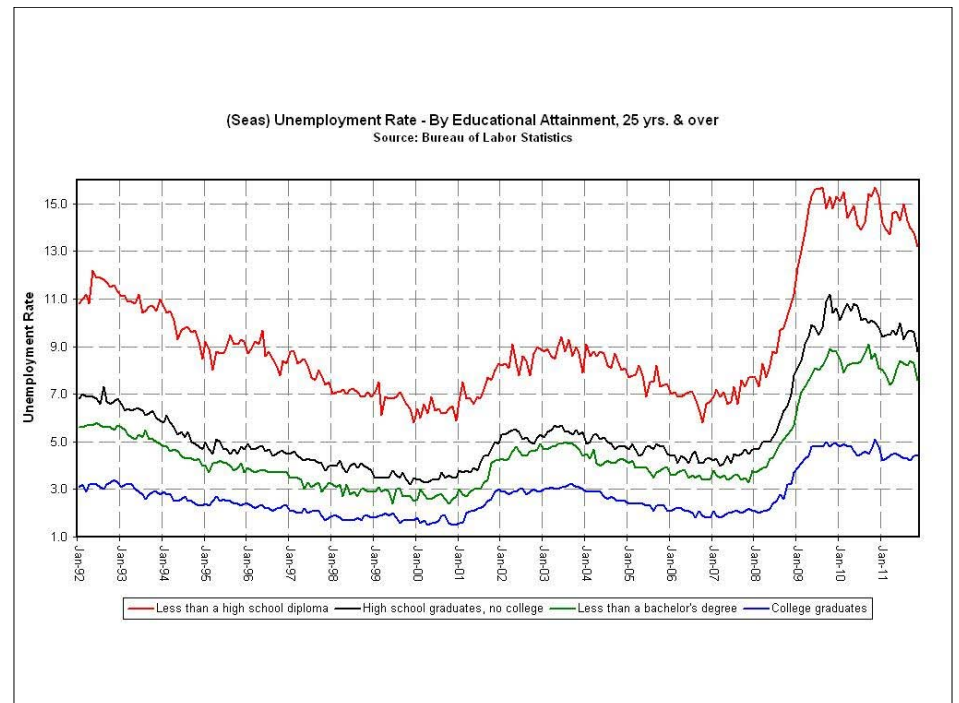
Our Goals

We will utilize technology to...

1. Raise student achievement through individualized learning experiences

2. Increase engagement and excitement for learning

3. Equip students with collaboration, creativity, and critical thinking skills

4. Encourage students to communicate locally and globally

WHY THE iPAD?

- Instant on
- Portable
- Long battery life
- Handwriting and typing capability
- Economical
- Local content storage

Our Expectations

1. This is all about learning.

The Learning

The first question to ask is: "How do we make everything we do about learning?"

Michael Fullan, Stratosphere

It's not all about the "stuff" but about about changing teaching and learning...

The Learning

In order for technology to maximize learning, it must:

1. Be irresistibly engaging
2. Elegantly efficient
3. Ubiquitous
4. Steeped in real-life problem solving

Michael Fullan, Stratosphere

Our Expectations

1. This is all about learning.
2. This is about transformation.

Technology Adoption Life Cycle

Transformation

Redefinition	Tech allows for the creation of new tasks, previously inconceivable
Modification	Technology allows for significant task redesign
Augmentation	Technology acts as a direct substitute, with functional improvement
Substitution	Technology acts as a direct substitute, with no functional improvement

Enhancement

Dr. Ruben R. Puentedura

Slide 1

Word Processing

From simple word processing to web

Redefinition
Tech allows for the creation of new tasks, previously inconceivable

Modification
Technology allows for significant task redesign

Augmentation
Technology acts as a direct tool, with functional improvement
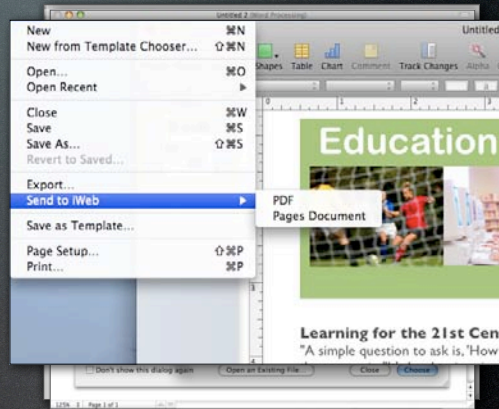
Substitution
Technology acts as a direct tool

Slide 2

Our Expectations

1. This is all about learning.
2. This is about transformation.
3. This is an experiment.

Slide 3

Slide 4

Our Expectations

1. This is all about learning.
2. This is about transformation.
3. This is an experiment.
4. Be a active contributor.
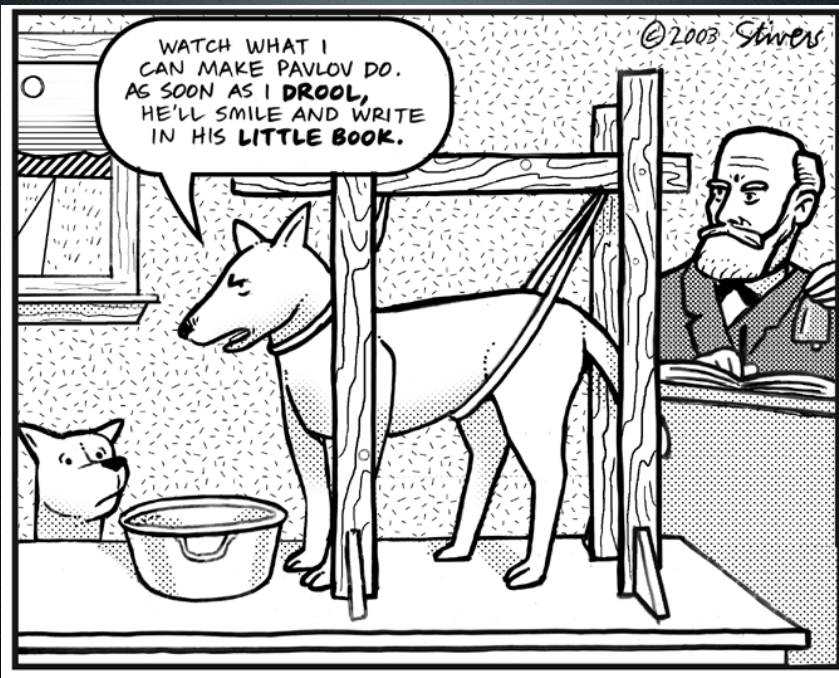
Our Expectations

1. This is all about learning.
2. This is about transformation.
3. This is an experiment.
4. Be a contributor.
5. Be a champion

Our Commitment

1. Training
2. Support
3. Resources

The 3 C's

- Critical thinking----THINK IT
- Collaboration & Communication----SAY IT
- Creativity----MAKE IT

They are not separate concepts....

iste
ISTE Wikispaces

Transforming Technology
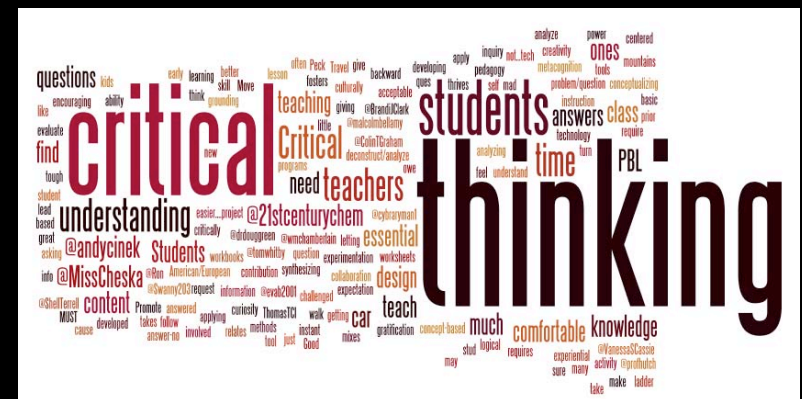
Critical thinking

- Comparison, classification, sequencing, cause/effect, patterning, webbing, analogies, deductive and inductive reasoning, forecasting, planning, hypothesizing, and critiquing.

- Collaborate with other classrooms across the US or globally

- Remember publishing is not the end...there is tremendous value in getting global feedback and students improve work
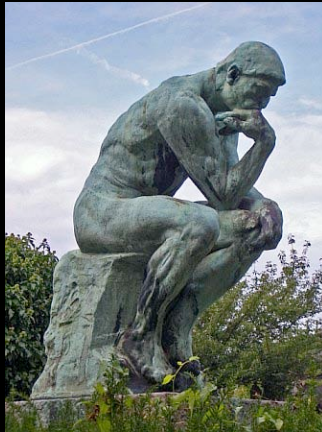
Critical Thinking

- <u>Example: Where does all the paper go?</u>

  - Collecting, researching, and analyzing data

  - Creating and testing hypotheses

  - Enter data in a Google spreadsheet

  - Create a wiki/blog for student conversation and document observations

HOTS! High order thinking skills
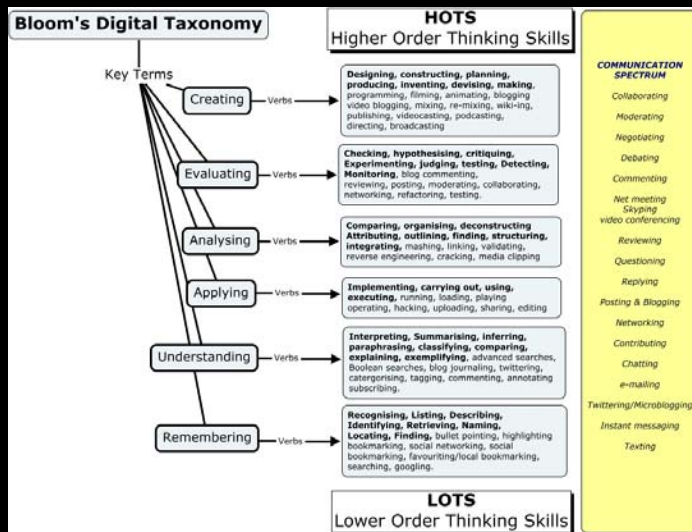
Collaboration and Communication

- Collaborate within your classroom

- Collaborate within your school--i.e. learning buddies

- Collaborate with other classrooms across the US or globally

- It's the conversations, links and networks that have profound implications for life long learning

Collaboration and Communication

- Schoology
- Telepresence rooms
- Spanish and English classes working together
- ePals
- iChat and Facetime
- Wikis/Blogs
- Google Docs
- Skype

Creativity

An old idea...

Response to literature: Draw a picture and write a sentence/paragraph

In the 21st century...

Create book trailers!

Creativity

- The lesson...
  - Show a movie trailer and discuss how it creates excitement for the upcoming movie
    - What did you like, what caught your attention

- Lightning Thief

Other examples

- Comic life

- Puppet Pals

- Keynote, Pages

- Book creator-Georgia

- Garageband, podcasting-Bystander

- iMovie, Tails of the 4th Grade Nothing-

- iBook Author-Ara
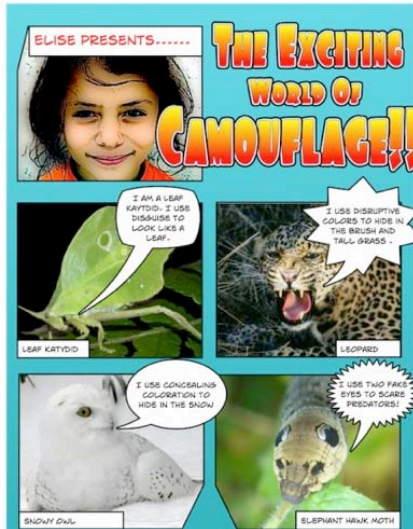
Screen Chomp

- White board--quick formative assessment

- Students demonstrate their work with voice over

- Teacher demonstrate work and upload for students....flipped classroom

- Find errors in chemical formulas, written work, math, etc and explain what is wrong

  - Have students review others work with answer key