

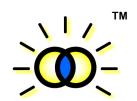
#### **Edwin Ellis**

Research Scientist Partner
University of Kansas Center for Research on
Learning

#### **Sue Woodruff**

SIM Professional Development Leader

# Vicki Ricketts SIM Professional Developer



MakesSenseStrategies.com
P.O. Box 147 Northport, AL 35476
(205) 394-5514 EdwinEllis1@gmail.com



Who are we?

Who are you?

How can we have the best possible day?



#### Meet Ed...



- Co-creater of SIM
- Author of Frames, LINCS, SLANT, Clarifying, DVTs, Makes Sense Strategies
- Long-time SIM Professional Developer

#### Ed's Perspective ...

Reducing teacher's cognitive load

Getting DVTs in hands of SIM PDers & educators

Enabling them to use DVTs effectively to maximize the learning experience & outcomes



#### Meet Sue...

Differentiated Isual Tools TM

SIM Professional Development Leader

#### Sue's Perspective ...

- Help SIM Network see how DVTs integrate naturally into what we do
- Analyze as a group how the SIM Network can leverage these tool
- Teachers are hungry for these types of tools & and are looking for tools to help them address & meet very complex standards with students



#### Meet Vicki...



- Co-author of "Differentiated Visual 100 stor Strategic Instruction in Literature, Grades 9-10"
- Long-time SIM Professional Developer

#### Vicki's Perspective ...

- Unique perspective of the power of DVTs from working with beta-testers from across the country
- Crossroads vs. Merging highways SIM / DVT integration

# MOST IMPORTANTLY! YOUR ROLE

- Teacher
- Learner
- Leader
- Collaborator
- Thinker
- Integrator

WHAT ELSE???

#### **KEY QUESTIONS...**



What are Differentiated Visual Tools (DVTs)?

Who are they for?

Why might a teacher want to use them?

**How** do they address Core ELA standards ...Next Generation Science Standards? ...NCSS Standards?

How do DVTs integrate with SIM? LSI? CE?

What does DVT instruction look like?

**How do DVTs utilize technology?** 

What are key ways to facilitate and support DVT implementation in my region? ...district ...school?

How will DVTs integrate with other initiatives in my region? ...district ...school?

### **KEY KNOWLEDGE & SKILLS...**



#### **Awareness of...**

\* DVT programs for different grades & subjects / testailable professional development resources

#### **Practical skills...**

- \* How to navigate the software
- \* How use the DVT Power Point & Fillable PDF

#### forms Sophisticated skills...

- \* Planning Courses, Units, & Lessons that utilize DVTs
- \* Developing a plan for supporting DVT implementation in your region ....district ...school

### How the workshop will

unfold "wrapped around" DVTs

- Part 2: Understanding DVTs in context of SIM & your current efforts to support SIM implementation
- Part 3: Developing specific plans and strategies for supporting SIM/DVT implementation

A LOT of what we'll do today will be based on where YOU take US

# A LOT of what we'll do today will be based on where YOU take US

(for having the MOST productive day today)

Ask questions

......

- Engage in dialogue
- Participate fully in this learning community
- Share your needs & experiences
- Have fun & enjoy learning





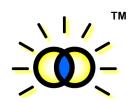
## Visualizing Disciplinary Thinking

## 10 KEY IDEAS about



Edwin Ellis, Ph.D.
Research Scientist Partner
University of Kansas Center for Research on Learning





K-12 Curriculum = two strands of learning standards

**INFORMATION** 

of content subjects

→ LITERACY

HOW / WHEN / WHY to do things to solve problems

#### **K-12** Curriculum = two strands of learning standards

#### **INFORMATION**

RELATIONAL UNDERSTANDING of content subjects

For example...

Science

**Social Studies / History** 

**Economics** 

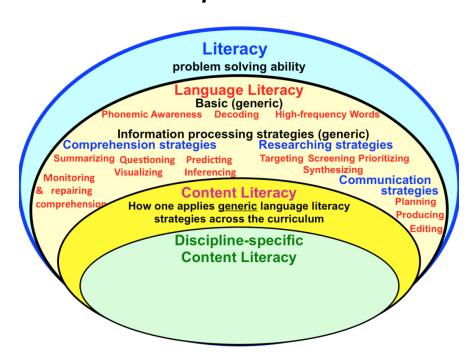
**Civics** 

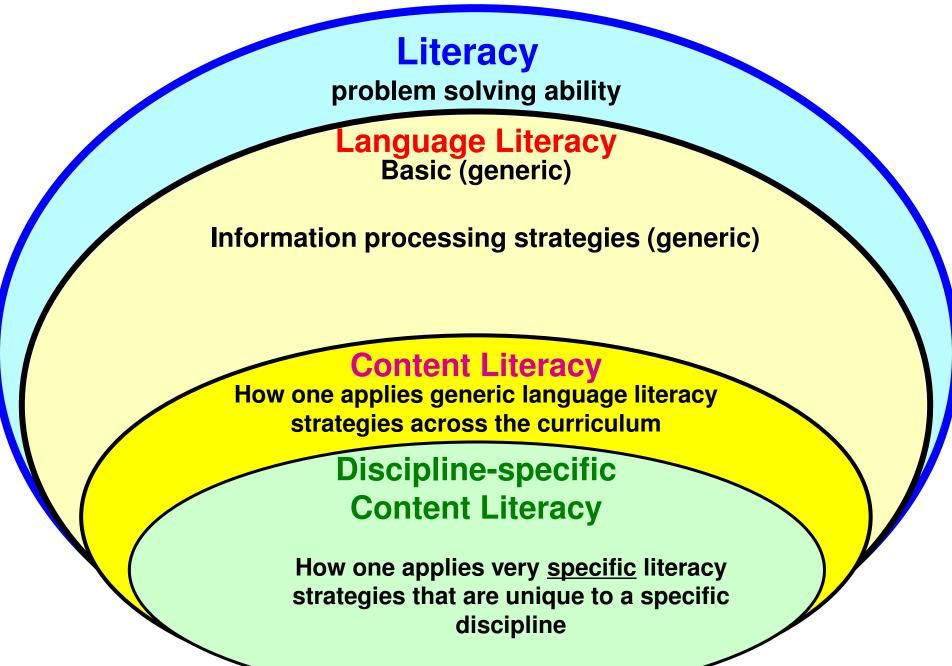
Math concepts

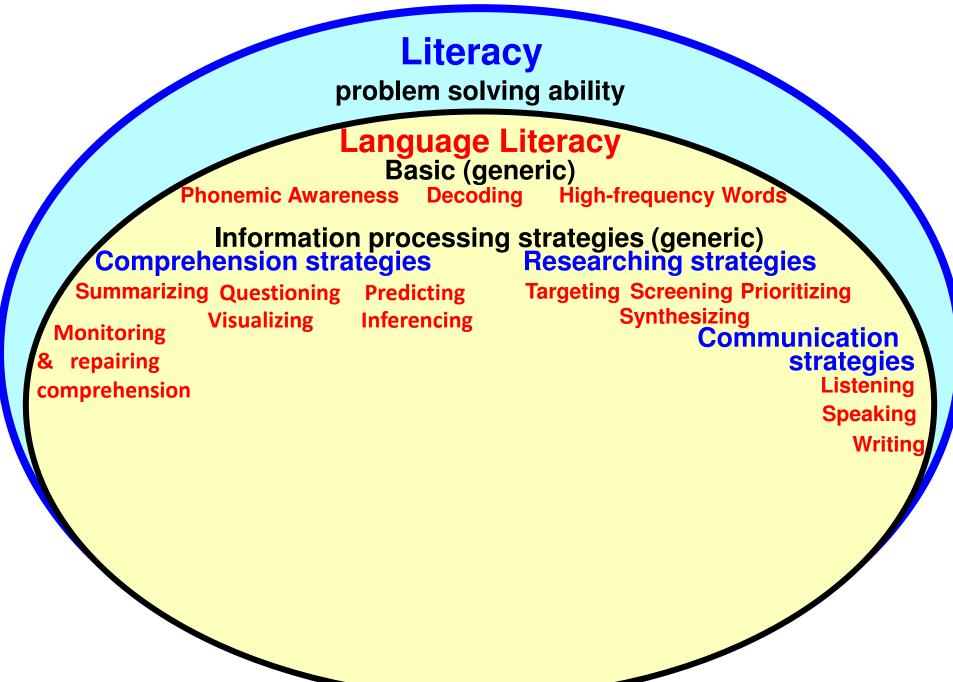
Etc.

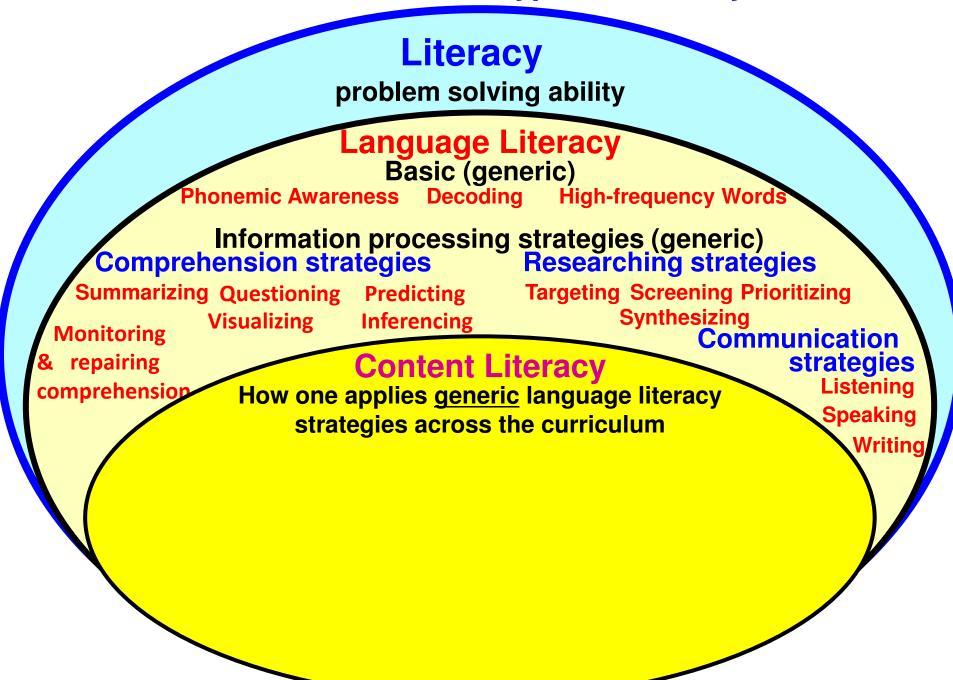
#### **LITERACY**

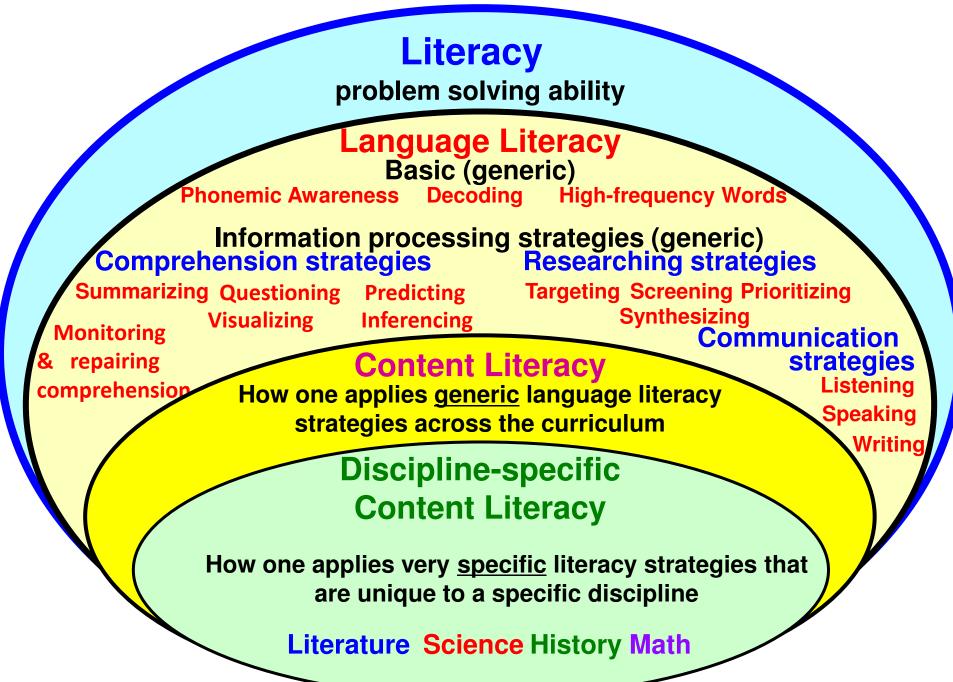
HOW / WHEN / WHY to do things to solve problems

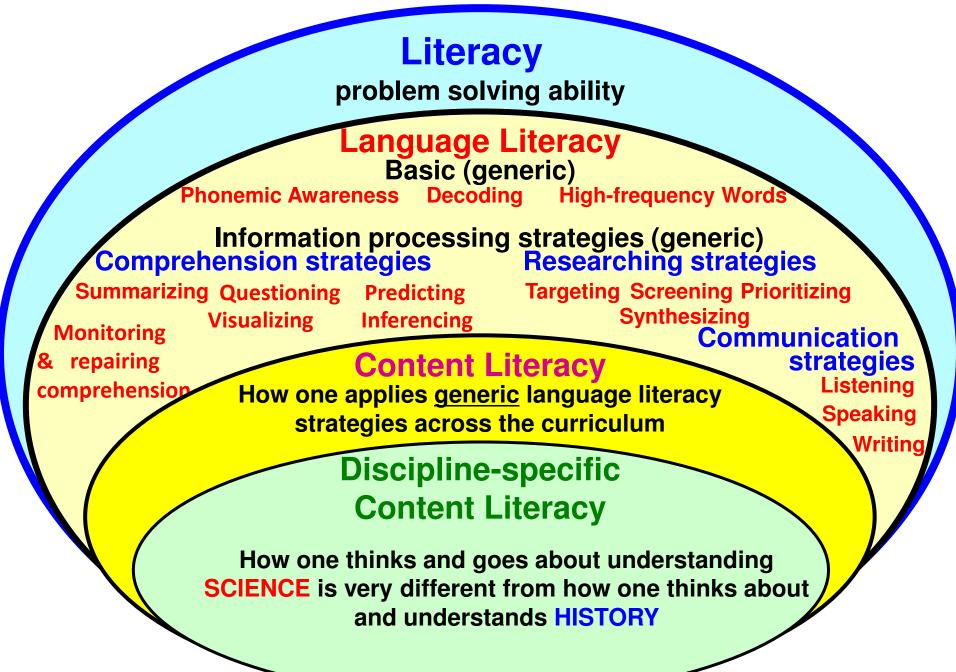


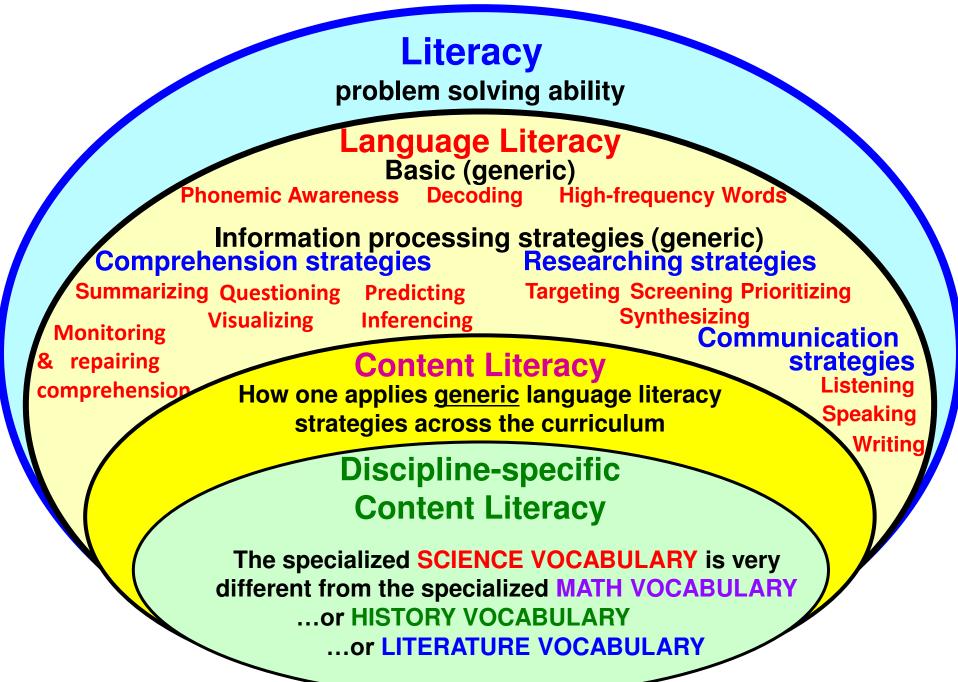












INFORMATION
RELATIONAL UNDERSTANDING
of content subjects

#### **LITERACY**

HOW / WHEN / WHY to do things to solve problems

Acquisition
Learning to perform it correctly
(high cognitive load)

Fluency

Learning to perform it <u>smoothly & quickly</u> (low cognitive load)



**Transfer & Generalization** 

Using skill/strategy to solve a range of problems in different situations & settings

#### **INFORMATION**

of content subjects

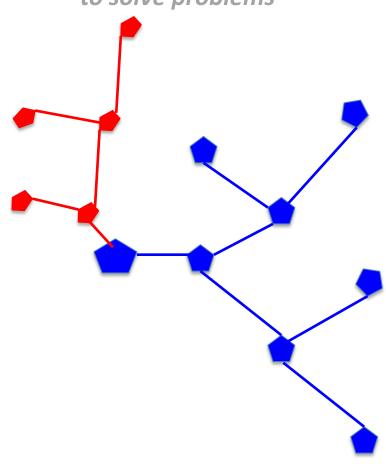
SUPERFICIAL / ERRONEOUS / SURFACE



Relational understanding of knowledge ranges from...

#### LITERACY

HOW / WHEN / WHY to do things to solve problems



#### **INFORMATION**

of content subjects

#### **LITERACY**

HOW / WHEN / WHY to do things to solve problems

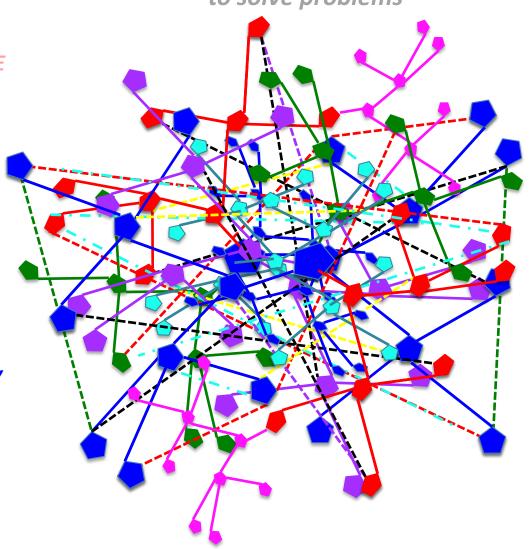
SUPERFICIAL / ERRONEOUS / SURFACE



Relational understanding of knowledge ranges from...



SOPHISTICATED / BREADTH / DEPTH / ACCURATE / MANY CONNECTIONS



#### **INFORMATION**

RELATIONAL UNDERSTANDING of content subjects

SUPERFICIAL / ERRONEOUS / SURFACE

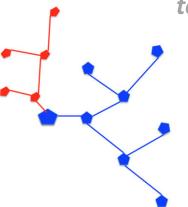


Relational understanding of knowledge ranges from...

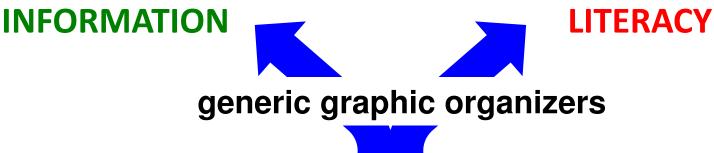


#### **LITERACY**

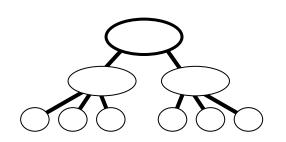
HOW / WHEN / WHY to do things to solve problems

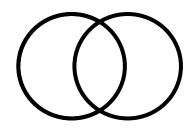


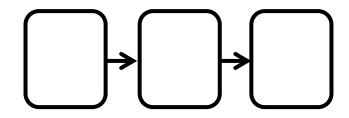
How do you make this happen?



**VERY EFFECTIVE tools for teaching both areas** 







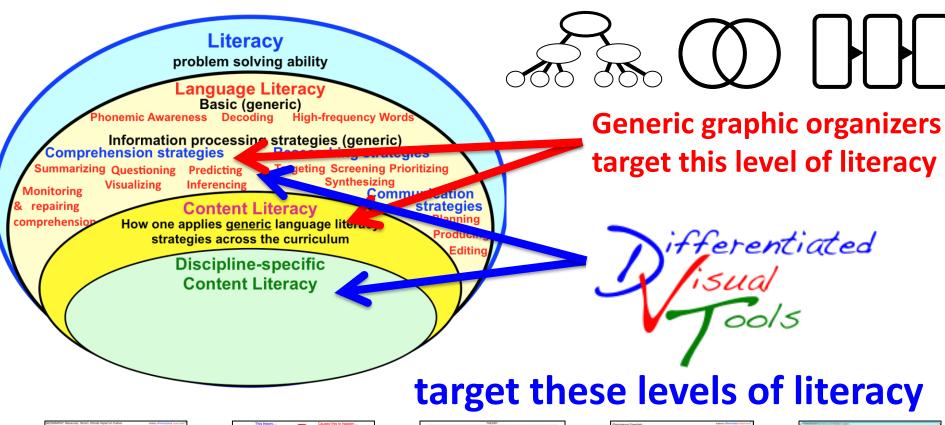
**Enable students to SEE how the information is structured** 

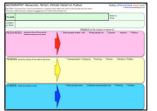
It's NOT a VISUAL LEARNER thing

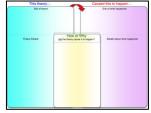
It's a HOW TO REDUCE COGNITIVE LOAD thing

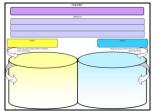
It's a HOW TO STRUCTURE FOR SUCCESS thing

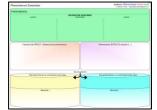
## The same instructional strategies & tools do NOT work equally well for each different type of literacy





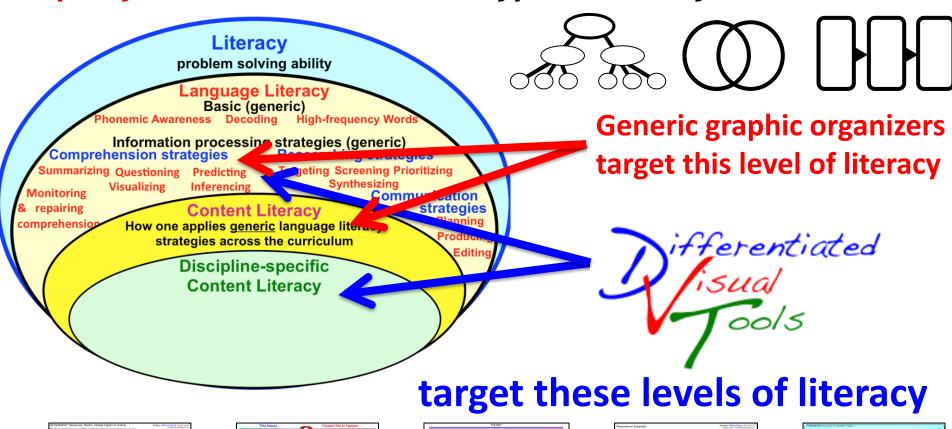








## The same instructional strategies & tools do NOT work equally well for each different type of literacy

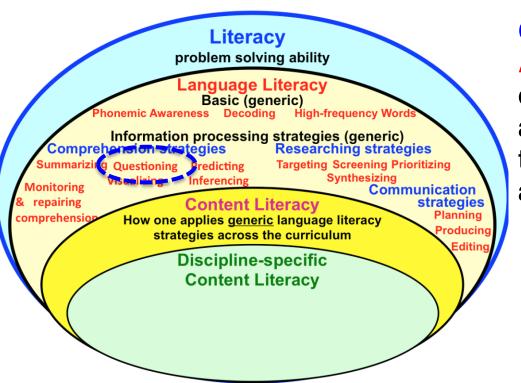


# s are individually designed to address specific literacy standards



# specific literacy standards

Literacy Skill: Questioning



CCSS.ELA-Literacy.RI.3.1
Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.



#### Meet the Mayor by Arnim Franke



WHO was the main PERSON in the story?

#### The Mayor

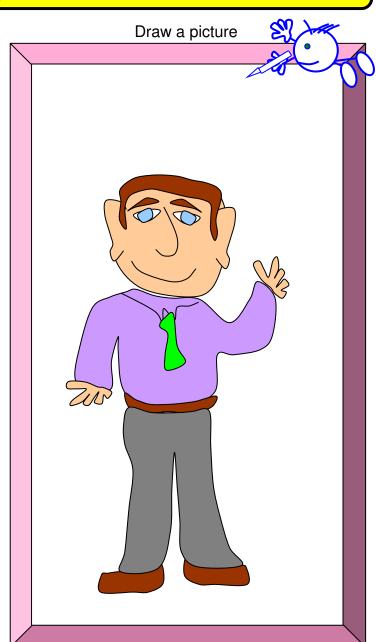
WHAT happened to the PERSON?

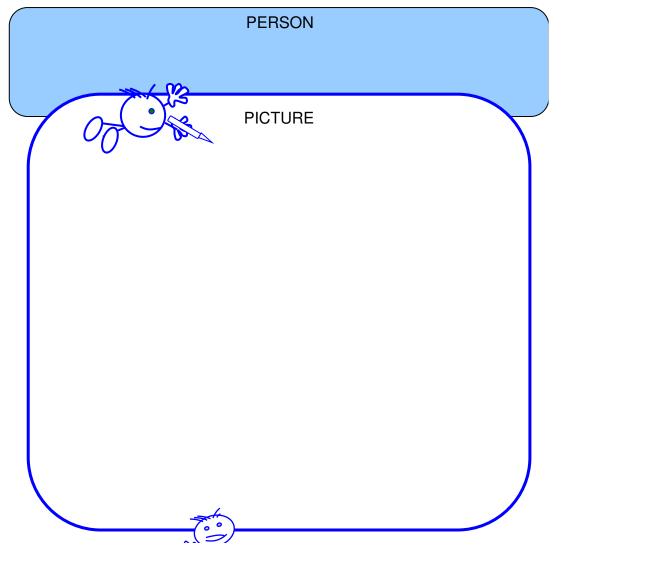
People vote for who they want to be mayor. The mayor promises to work hard. They work in city hall, and make laws and rules.

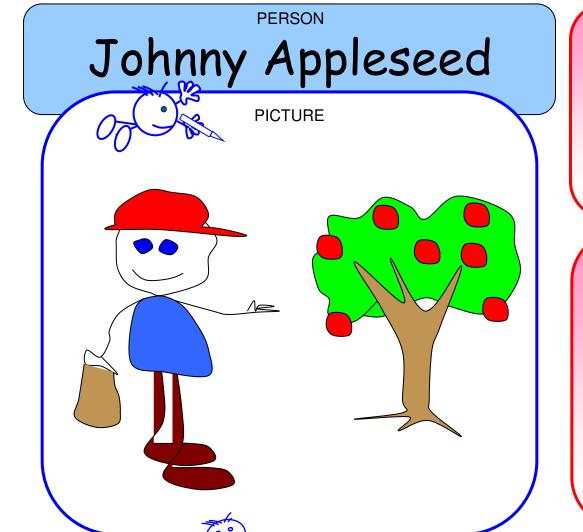
WHERE did it happen?

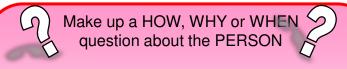
In every city and town in the United States

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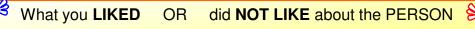
Why did Johnny Appleseed plant so many apple trees?



Answer to your question

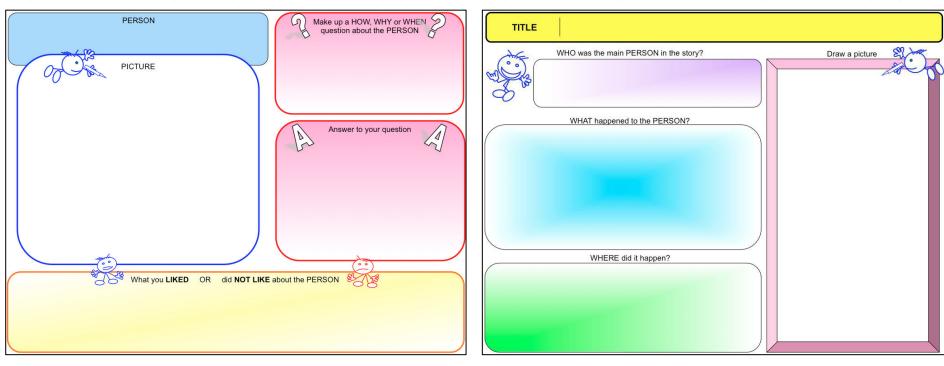


He was a nurseryman. He wanted everyone to have an apple tree. He taught people how to take care if plants and land.



I like him because he cared about animals and the earth.

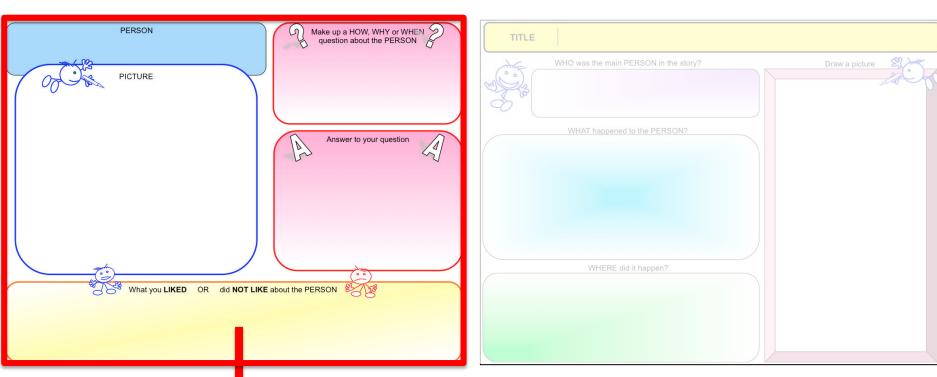
#### So what is the difference between these two visual tools?



HINT: Here's the standard....

Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

#### Is are individually designed to address specific literacy standards

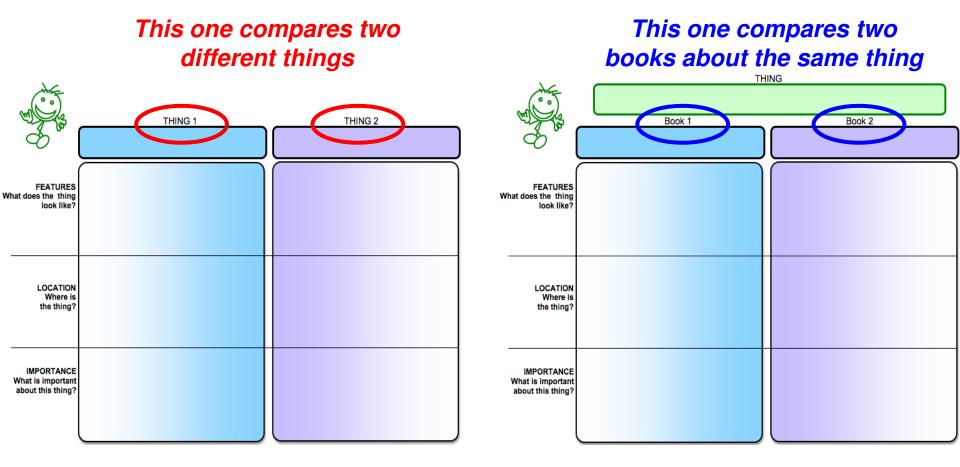


This visual tool is specifically designed to address THIS specific standard

Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. Let's say you are attempting to teach this 3rd grade standard...

Compare and contrast the most important points and key details presented in two texts on the same topic.

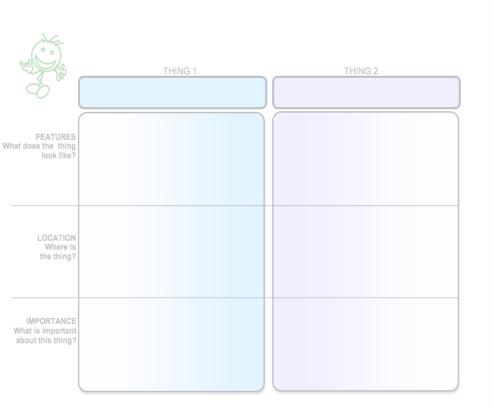
Which of these address the standard?

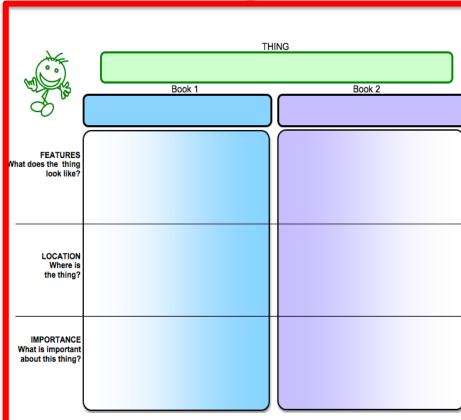


Let's say you are attempting to teach this 3rd grade standard...

Compare and contrast the most important points and key details presented in two texts on the same topic.

This visual tool is specifically designed to address THIS specific standard







# **Process Time**

#### PAUSE AND THINK ABOUT WHAT YOU'VE HEARD

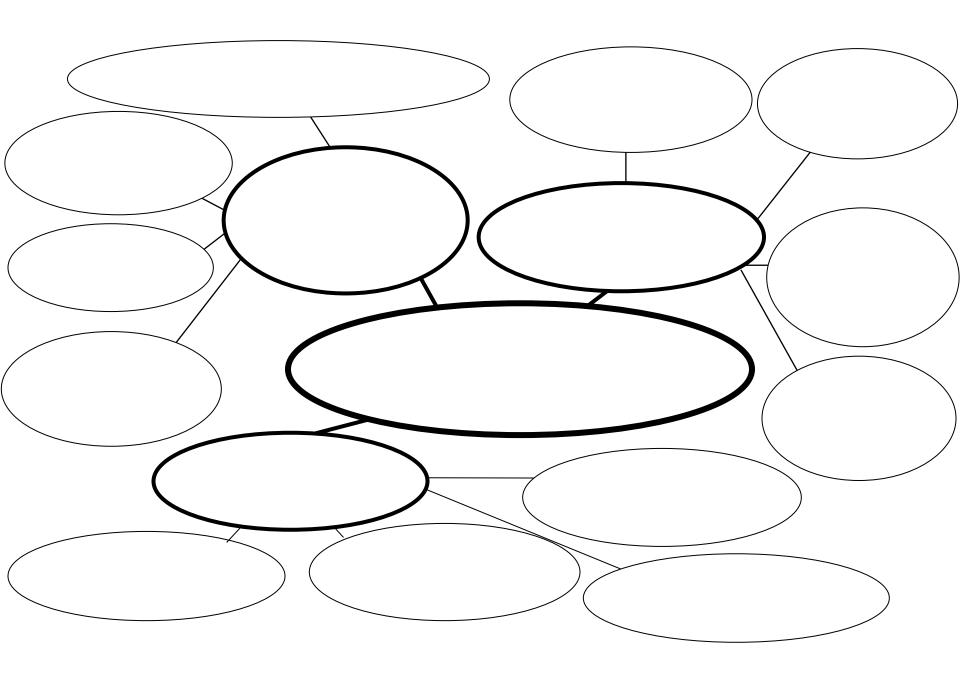
With your elbow partner...

- paraphrase Key Idea #1 to each other
- clarify and / or question

With larger group...

- share your thoughts
- ask clarifying questions

Web generated from a 5<sup>th</sup> grade guided reading / note taking lesson...



#### Web generated from a 5<sup>th</sup> grade guided reading / note taking lesson... Next slide = identical info (word-for-word) but different visual tool

White Star Line owners liked "unsinkable" Titanic promoted as Fewer lifeboats idea, so they encouraged people to believe it fastest so to prove it, took so ship seems more risks speeding through attractive = selling Newspaper: iceberg zone more tickets "Titanic is largest & fastest – probably even When a myth is unsinkable" Putting profit treated as truth, Used over safety puts people's people fool cheaper steel in Builders began to lives at great risk hull (more brittle & themselves believe the myth; thin) + only 1 hull to took short-cuts save \$ on building **Titanic** cost **BIG IDEA** essons from a Disaster Don't believe it just BIG IDEA How the sinking of a great ship led to important because somebody said Safety always lessons that changed society produces the greatest it or wrote it profit in the Are wealthy Many of poor were long run people more locked below to keep valuable? them from taking spaces

A great disaster can cause society to examine its values and practices so improvements can be made that will save lives in the future

Cabins closest to deck

most expensive =

rich reach lifeboats 1st

Rich were given priority

over poor for spaces on

lifeboats

on the lifeboats

**BIG IDEA** 

ALL human life is equally

valuable, regardless of wealth!

#### Titanic Lessons from a Disaster

Is about ...

How the sinking of a great ship led to important lessons that changed society

When a myth is treated as truth, people fool themselves

Main Idea

Putting profit over safety puts people's lives at great risk

Main Idea

Are wealthy people more valuable?

Main Idea

Newspaper:

"Titanic is largest & fastest – probably even unsinkable"

Titanic promoted as fastest ship so, to prove it, took risks speeding through iceberg zone)

Cabins closest to deck most expensive = rich reach lifeboats 1st

White Star Line (owners) liked "unsinkable" idea, so they encouraged people to believe it Fewer lifeboats so ship seems more attractive = selling more tickets

poor for spaces on lifeboats

Many of poor were locked

Rich were given priority over

Builders began to believe the myth; took short-cuts

Used cheap steel in hull – (more brittle & thin) + only 1 hull to save \$ on building cost

below to keep them from taking spaces on the lifeboats

BIG IDEA

Don't believe it just because somebody said it or wrote it

BIG IDEA
Safety always produces the greatest profit in the long run

BIG IDEA

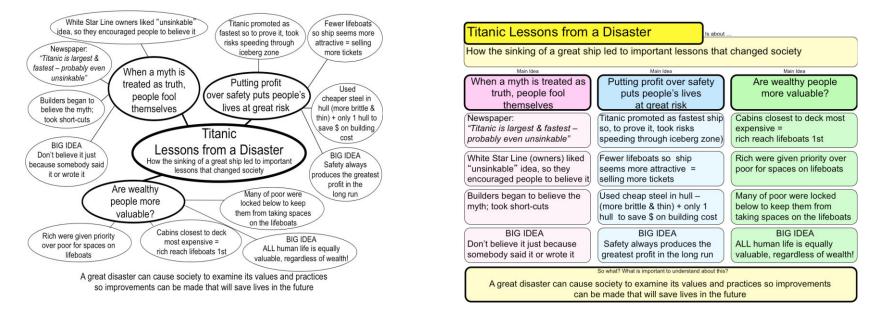
ALL human life is equally valuable, regardless of wealth!

So what? What is important to understand about this?

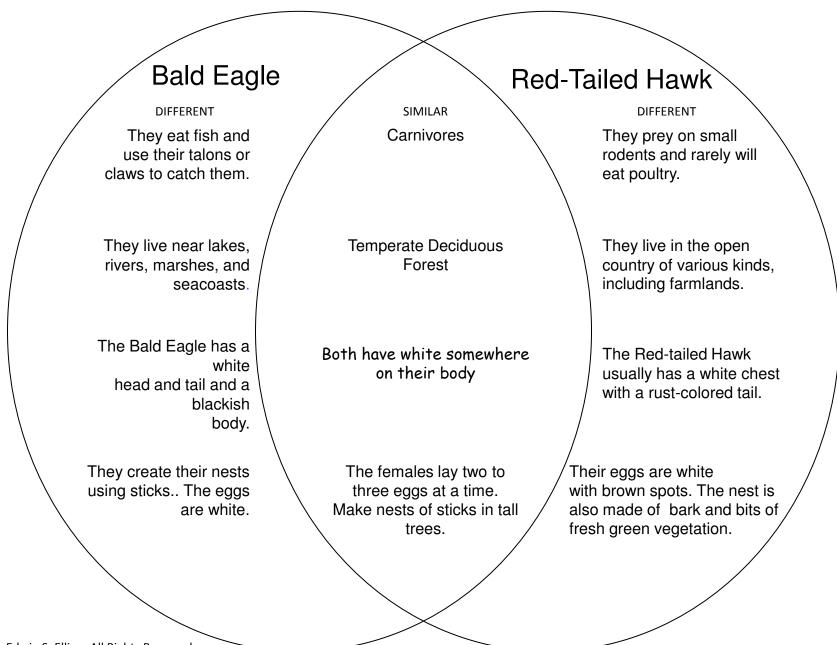
A great disaster can cause society to examine its values and practices so improvements can be made that will save lives in the future

So what? A graphic's visual design makes a huge difference, especially with struggling learners

#### Which would you rather have?



Idea is to make it easier (not harder) to process information



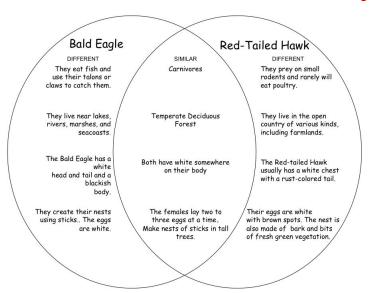
#### Same information (word-for-word) plus semantic prompts

	Bald Eagle		Red-Tailed Hawk
Food	They eat fish and use their talons or claws to catch them.	SIMILAR Carnivores	DIFFERENT They prey on small rodents and rarely will eat poultry.
Habitat	They live near lakes, rivers, marshes, and seacoasts.	Temperate Deciduous Forest	They live in the open country of various kinds, including farmlands.
Color	The Bald Eagle has a white head and tail and a blackish body.	Both have white somewhere on their body	The Red-tailed Hawk usually has a white chest with a rust-colored tail.
Nests	They create their nests using sticks The eggs are white.	The females lay two to three eggs at a time. Make nests of sticks in tall trees.	Their eggs are white with brown spots. The nest is also made of bark and bits of fresh green vegetation.

Notessential understanding prompits adds to the visual

So what? Adding semantic "essential understanding" prompts makes a huge difference because they focus thinking ...especially important for struggling learners

#### Which would you rather have?



	Bald Eagle		Red-Tailed Hawk
Food	DIFFERENT They eat fish and use their talons or claws to catch them.	SIMILAR Carnivores	DIFFERENT They prey on small rodents and rarely will eat poultry.
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#### **KEY IDEA #2 Some visual tools are a lot better than others!** Essential understandings are People - literature **Huck Finn** discipline specific Jim **DIFFERENT SIMILAR DIFFERENT** View of Self View of others Motivation Interactions with others People - history Washington Lincoln DIFFERENT DIFFERENT **SIMILAR** Goals **Key Decisions** Factors weighed when making those decisions Impact of decisions



# **Process Time**

#### PAUSE AND THINK ABOUT WHAT YOU'VE HEARD

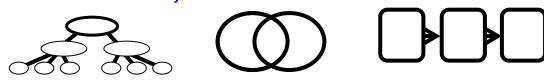
With your elbow partner...

- paraphrase Key Idea #1 to each other
- clarify and / or question

With larger group...

- share your thoughts
- ask clarifying questions





...very effective for basic standards

Retell stories, including key details, and demonstrate understanding of their central message or lesson.

Compare and contrast the adventures and experiences of characters in stories

## **BUT**

#### ...not so great as standards get more complex

Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.

(8th grade)

#### **KEY IDEA #3** *Discipline-specific* visuals are a LOT better than generic GOs when teaching complex standards

As grade levels increase, the nature of content learning changes ...it becomes increasingly more discipline-specific

#### The WAY one processes information in different subjects is very different

LITEDATUDE

SCIENCE	HISTORY	LITERATURE	MAIH
Specialized science vocabulary	Specialized history vocabulary	Specialized literature vocabulary	Specialized math vocabulary
Unique set of science generative ideas	Unique set of history generative ideas	Unique set of literary analysis generative ideas	Unique set of math generative ideas
How one thinks about & understands science	How one thinks about & understands history	How one thinks about & understands literature	How one thinks about & understands math

#### generic, one-size-fits-all GOs fail to address these important differences in disciplines

LICTODY

CCIENCE

# KEY IDEA #3 Discipline-specific visuals area LOT better than generic GOs when teaching complex standards

#### Let's say you are attempting to teaching this standard...

RL.9-10.2. Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

#### What's the difference between...

# THIS

#### ...and THIS?

TOPIC of the story	THEME of the story is (author's unstated opinion or message about the story's topic
escription of an EVENT, CHARA	ACTER, OF SETTING CONNECTIONS TO THE THEME
Literary device used in the connection in the co	on → Irony Satire Parody Motivation Personification Symbolism Other
literary device used in the connection	on → Irony Satire Parody Motivation Personification Symbolism Other
iterary device used in the connecti Explanation	on → Irrony Salire Parody Molivation Personification Symbolism Other
Literary device used in the connection in the co	on → Irony Salire Parody Motivation Personification Symbolism Other
Literary device used in the connecti Explanation	on → Irrony Salire Parody Motivation Personification Symbolism Other

STORY	The Pardoner's Tale by Geoffrey Chaucer			
_	TOPIC of the story  Loyalty  THEME of the story is (author's unstated opinion or message about the story's topic)  Betraying your friends will lead to your own downfall.			
	Description of an EVENT, CHARACTER, or SETTING CONNECTIONS TO THE THEME  CHADACTED. The three rioters have been in Because they have all gotten drunk together they say			
a bar all night long and are very drunk they are loyal to each of			they are loyal to each other when they're not. (False friends often turn on each other.)	
Literary device used in the connection     Satire   Parody   Motivation   Personification   Symbolism   Other				
SETTIN	SETTING - The gold under the tree  When the three rioters find the gold under the tree each starts thinking about getting rich - selfishnes quickly replaces loyalty			
Literary device used in the connection → Irony Satire Parody Motivation Personification Symbolism Other Explanation  The gold symbolizes greed and shows how it can make people turn on each other.				
EVENT - The three robbers end up killing each other		ree robbers end up killing	Because they all turned their backs on each other to try and keep more of the gold, they all ended up dead.	
Literary device used in the connection →lronySatireParody X MotivationPersonificationSymbolismOther				

The Pardoner's Tale

The Pardoner's Tale by Geoffrey Chaucer is a story about loyalty, or rather the lack of it. I think Chaucer's message about life is "Betraying your friends will lead to downfall." For example, one of the ways Chaucer communicates this message is by his use of characters and irony. Three rioters have been in a bar all night and have gotten very drunk. They talk about how loyal they are to each other and how they have become brothers. In reality, they just met each other in a bar and are not loyal to each other at all. They're just drunk. Basically Chaucer is saying that false friends will turn on each other.

Chaucer uses irony to set the stage in this part of the story to establish that the so-called loyal friends are about to betray each other later in the story.

Chaucer also uses the setting of the story and symbolism to communicate the betrayal theme. There's a particular setting where there is a bag of gold under a tree. The gold symbolizes greed and shows how it can make people turn on each other. The men think that if they take the gold, they will be very happy. In other words, the greed of the rioters will far outweigh any false loyalty they may have toward each other. Each wants the gold for himself.

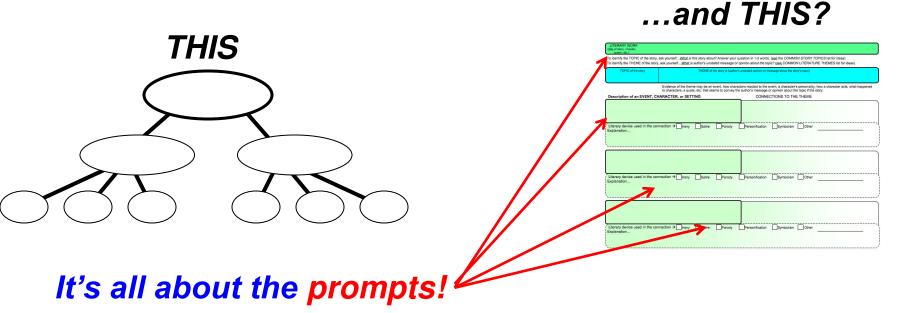
The three robbers end up killing each other. Here, Chaucer uses an event in the story and motivation as a literary device to illustrate the betrayal theme. Because they all turned their backs on each other to try and keep more of the gold, they all ended up dead.

Chaucer use of irony, symbolism, and motivation all relate to the story's theme of loyalty. A theme is a message about life, and the message here is that false friends turn on each other. If the thieves were true friends, they wouldn't have killed each other because of greed for the gold.

Loyalty			
Loyarry	Den aying your in tends in in	ioda to your own down and	
Description of an EVENT	CHARACTER, or SETTING CONNECTIONS TO		
	he three rioters have been in ing and are very drunk.	Because they have all gotten drunk together they so they are loyal to each other when they're not. (False friends often turn on each other.)	
iterary device used in the	connection → X Irony Satire Parody	Motivation Personification Symbolism Other	
xplanation ronic because it s ach other out and	eems like they are really good friend I share stuff, but the reality is, the	nds, so you would expect them to help by end up doing the opposite.	
SETTING - The	gold under the tree	When the three rioters find the gold under the tree each starts thinking about getting rich – selfishness quickly replaces loyalty	
iterary device used in the	connection → Irony Satire Parody	Motivation Personification Symbolism Other	
xplanation The gold symbolize	es greed and shows how it can make	people turn on each other.	
EVENT - The the	nree robbers end up killing	Because they all turned their backs on each other t try and keep more of the gold, they all ended up dec	

#### **KEY IDEA #3** Discipline-specific visuals area LOT better than generic GOs when teaching complex standards

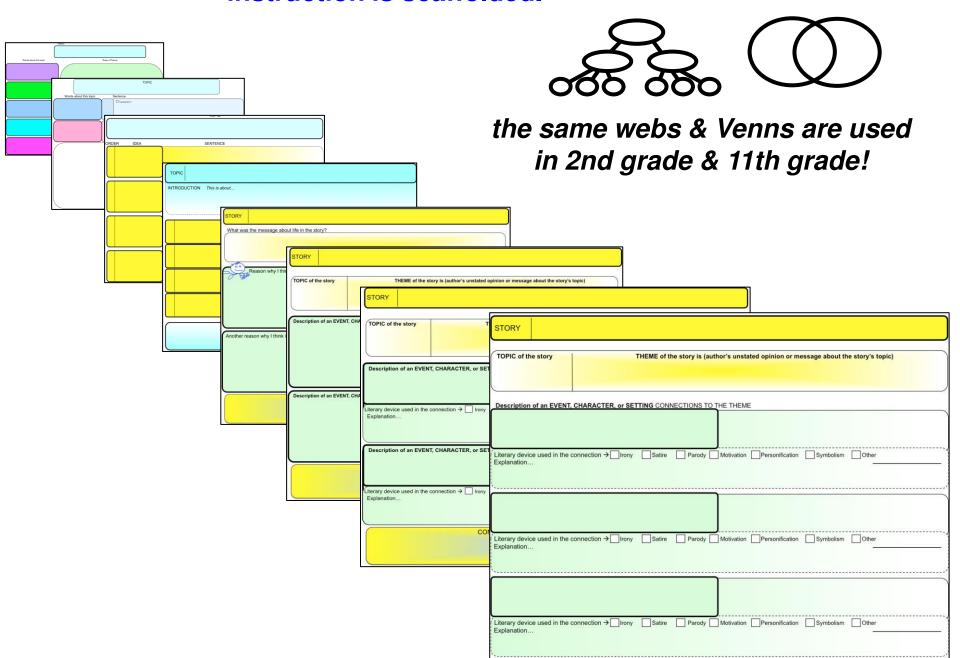
#### What's the difference between...



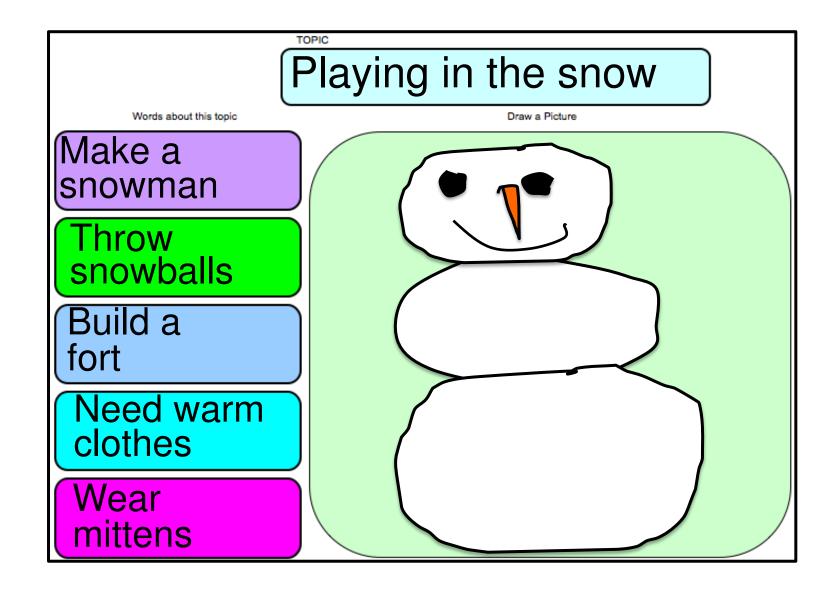
\* Clear & explicit \* Guide thinking \* Simple

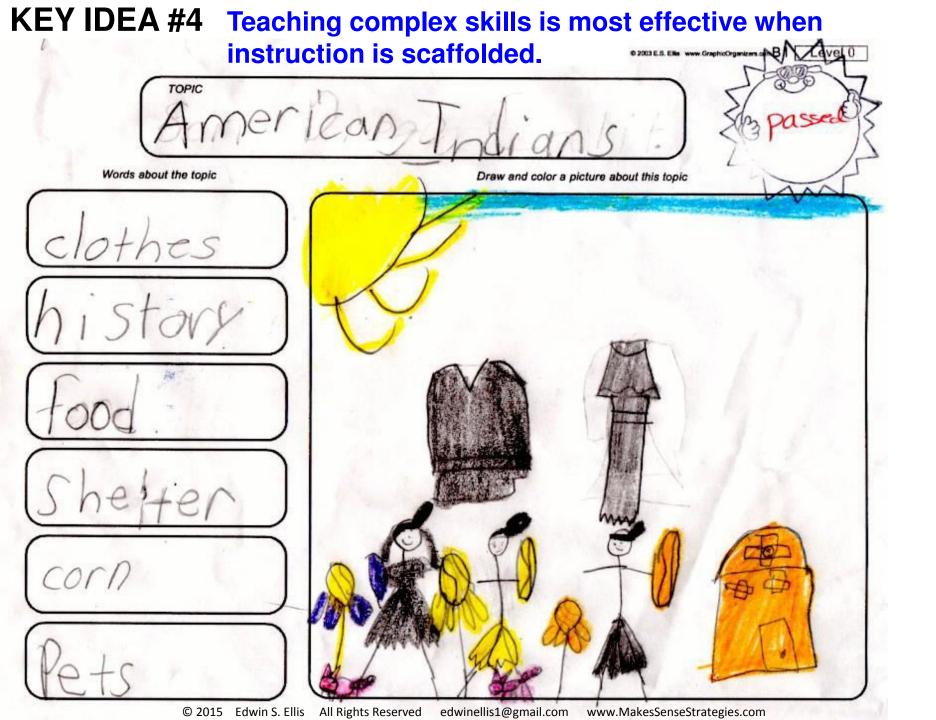
\* Standard-specific

KEY IDEA #4 Teaching complex skills is most effective when instruction is scaffolded.

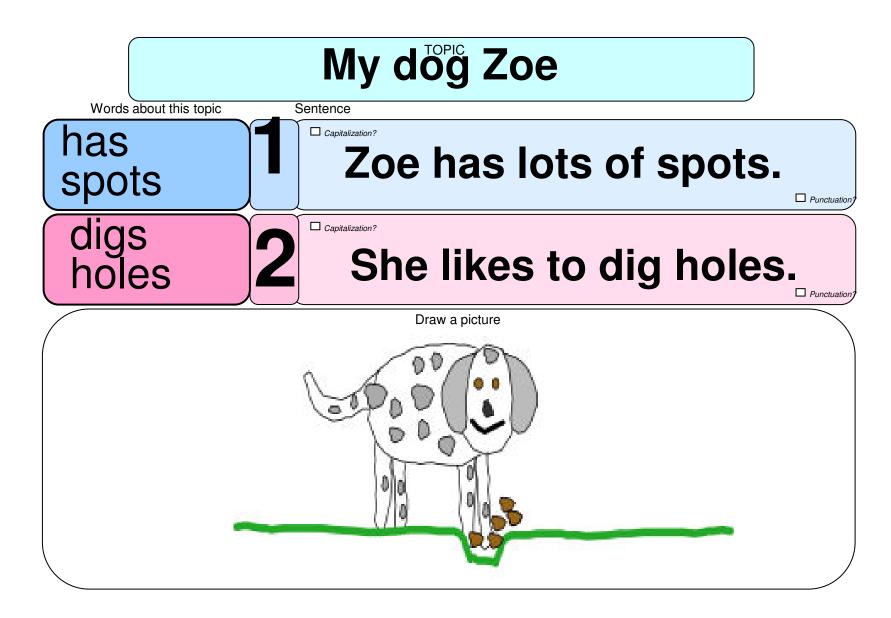


#### KEY IDEA #4 Teaching complex skills is most effective when instruction is scaffolded.





#### KEY IDEA #4 Teaching complex skills is most effective when instruction is scaffolded.



**KEY IDEA #4** Teaching complex skills is most effective when instruction is scaffolded.

**TOPIC** 

# Thanksgiving is my favorite holiday!

ORDER IDEA SENTENCE

2 Wearing costumes

At school we dress up like Pilgrims or Native Americans. That is really fun.

Native
Americans

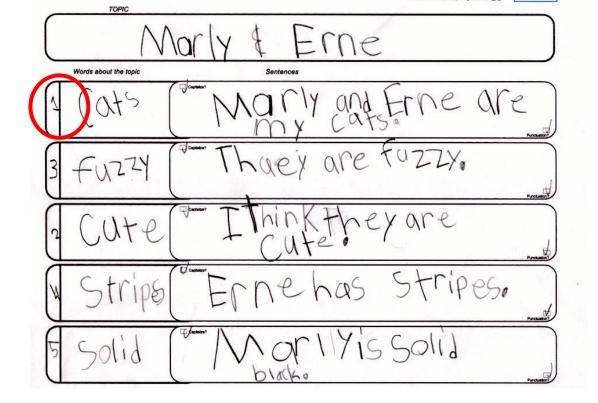
We visit Moundville and climb the mounds where the Native Americans lived. We see ceremonies and get our faces painted.

3 The feast!

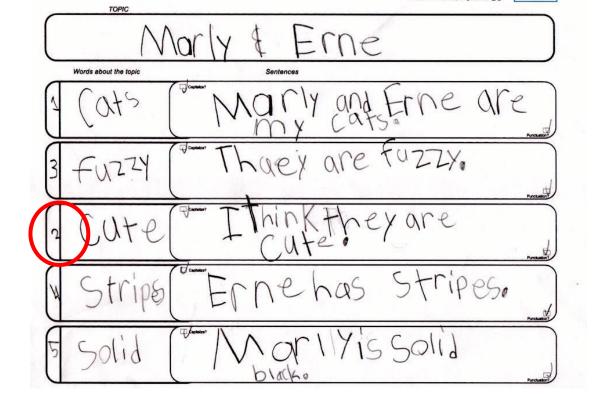
We have a Thanksgiving feast at school just like the Pilgrims and Native Americans had.

4 Out of school

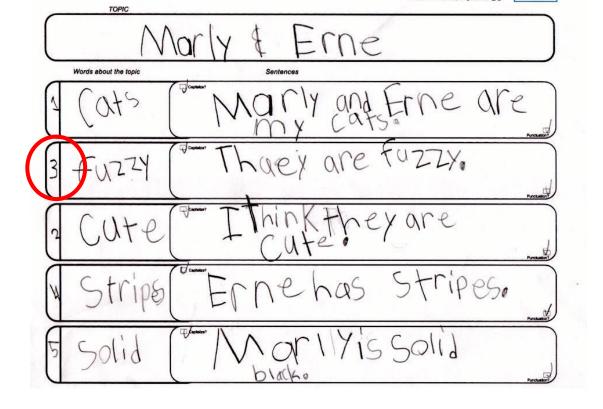
I also like to be out of school for a week, and I get to do things with my family.



Marly & Erne

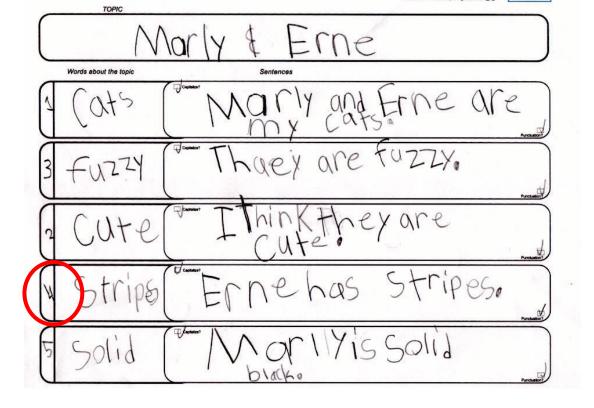


Marly & Erne Marly and Erne are my cats.



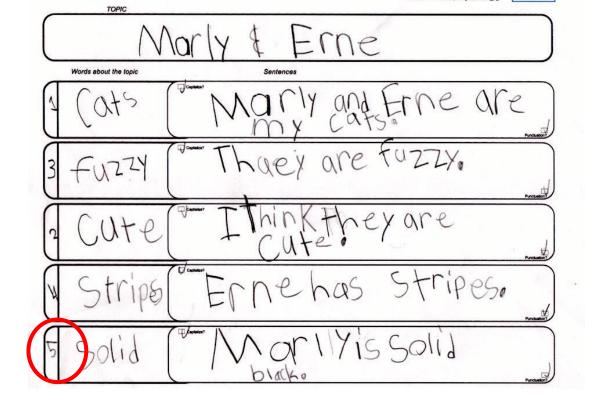
Marly & Erne

Marly and Erne are my cats. I think they are cute.



Marly & Erne

Marly and Erne are my cats. I think they are cute. They are fuzzy.



### Marly & Erne

Marly and Erne are my cats. I think they are cute. They are fuzzy. Erne has stripes.

TOPIC

# Recycling

INTRODUCTION This is about...

why everyone should recycle the things they use in their homes.

3 Reduces landfills...

Recycling cuts down on the need for more landfills.

No one wants to live near one.

2 Protects wildlife...

Recycling protects wildlife habitats. Paper recycling alone saves millions of trees.

4 Helps our climate...

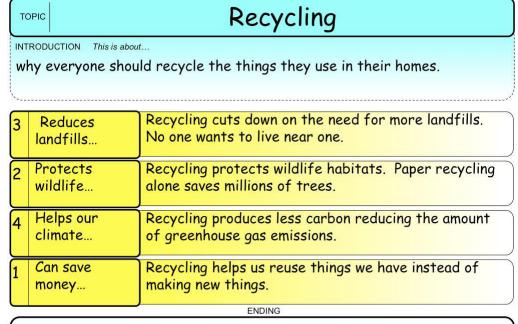
Recycling produces less carbon reducing the amount of greenhouse gas emissions.

Can save money...

Recycling helps us reuse things we have instead of making new things.

**ENDING** 

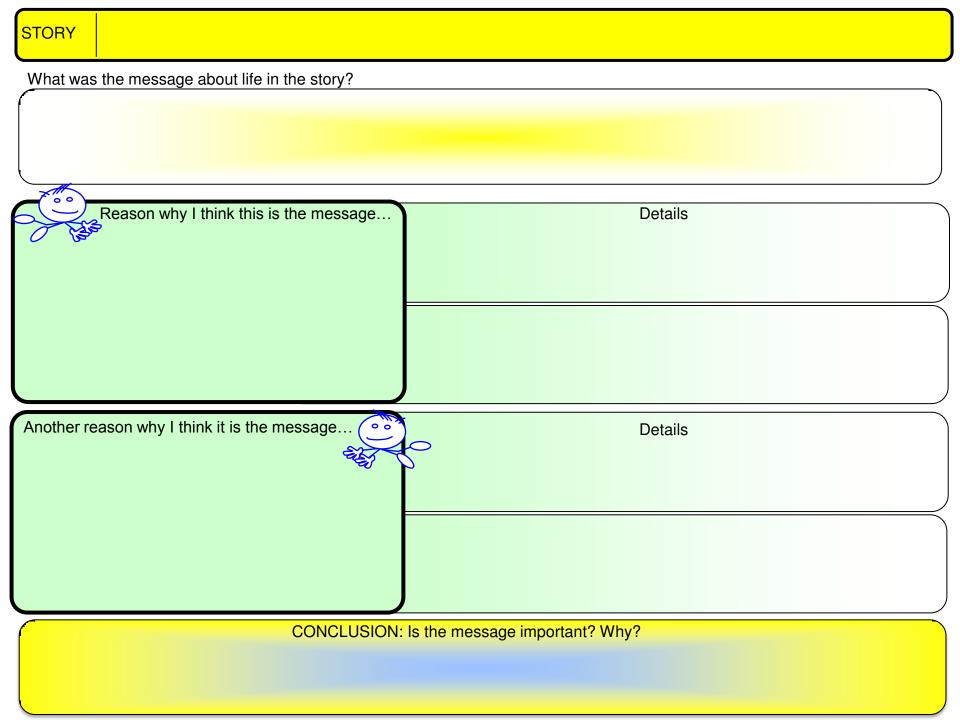
When we recycle it helps our climate, the earth, and protects wildlife. Also it is the right thing to do!



#### Recycling

When we recycle it helps our climate, the earth, and protects wildlife. Also it is the right thing to do!

Everyone should recycle the things they use in their homes. Recycling helps us reuse things we have instead of making new things. It also protects wildlife habitats. Paper recycling alone saves millions of trees. Recycling cuts down on the need for more landfills. No one wants to live near one. Recycling produces less carbon, so it reduces the amount of greenhouse gas emissions we make. In conclusion, when we recycle it helps our climate, the earth, and protects wildlife. Also it is the right thing to do!



# Mufaro's Beautiful Daughters

by John Steptoe

What was the message about life in the story?

I think the message was that being kind and good to people makes you happier and leads to a better life.



Reason why I think this is the message...

Nyasha was kind to everyone.

**Details** 

She did not try to hurt her sister who was mean to her.

She was chosen to be queen because of her kindness.

Another reason why I think it is the message...

Manyara was mean to her sister and everyone.

She was also mean to a little boy who was really the king.

Manyara ended up being a servant to her sister.

CONCLUSION: Is the message important? Why?

If you are mean to others, you will always be unhappy and just want to be even meaner.

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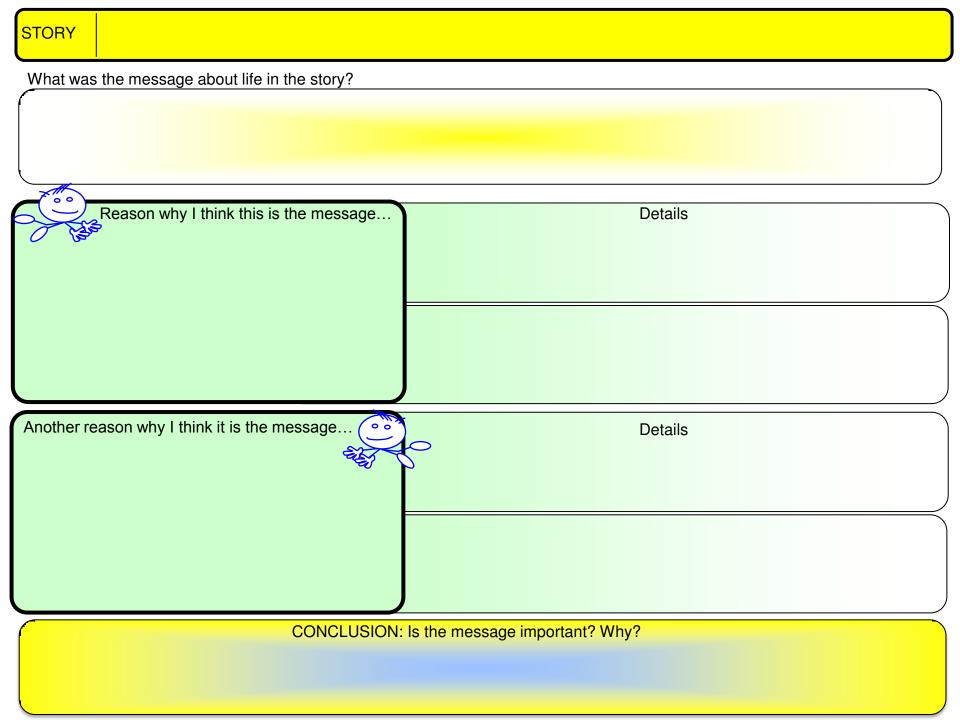
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STORY		
TOPIC of the story	THEME of the story is (author's unstated opinion or message about the story's topic)	
Description of an EVENT, CHARAC	CTER, or SETTING	CONNECTIONS TO THE THEME
Description of an EVENT, CHARACTER, or SETTING		CONNECTIONS TO THE THEME
	CONCLUSION: Is th	e message important? Why?

**STORY** 

# A Gathering of Days by Joan W. Blos

TOPIC of the story

challenges.

THEME of the story is (author's unstated opinion or message about the story's topic)

Circle of life

There are many circles of life that overlap.

#### Description of an EVENT, CHARACTER, or SETTING

Catherine lost her mother & little brother when she was 9 years old.
She had to run the household with help from her neighbor & sister
She learned how to cope with the

#### CONNECTIONS TO THE THEME

One of the "life circles" is about Catherine experiencing challenges or problems, dealing with them, moving on, facing new problems, dealing with them, moving on again, etc.

Father re-marries, new mother & brother Must adjust to a new mother & brother. Theme of the journal: "Got a problem? Deal with it! Move on."

#### Description of an EVENT, CHARACTER, or SETTING

One of the "life circles" is about the **seasons** of life.

Catherine's journal focuses on life on a farm Each season brings new promises, different jobs, new challenges, and joy Starts all over each year

#### **CONNECTIONS TO THE THEME**

Page 51 - "At mid-day today the storm let up; by dusk a few pale shadows appeared on the hillock'd snow. Father expects that tomorrow with be the day of the breaking out."

Page 121 - "The sap, they say, is running in the better sheltered trees."/ "Haying, mowing, gathering in!"

CONCLUSION: Is the message important? Why?

Everyone experiences the same basic circles of life, although they happen in different times and ways

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STORY		
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Description of an EVENT	, CHARACTER, or SETTING	CONNECTIONS TO THE THEME
Literary device used in the c Explanation	onnection → ☐ Irony ☐ Satire	Parody Motivation Personification Symbolism Other
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Literary device used in the c Explanation	onnection →  Irony  Satire	Parody Motivation Personification Symbolism Other
	CONCLUSION	: Is the message important? Why?

STORY	Т	he Brave by Robert Lipsyte				
TOPIC of the story	TOPIC of the story THEME of the story is (author's unstated opinion or message about the story's topic)					
Growth & initiation	Tea have to expenience many trials at the district to mile year own reason					
Description of an EVENT, CHARACTER, or SETTING  Sonny's mother is Native American & his white father died in Vietnam. He's a fighter and has a gift for drawing. He is embarrassed and hides his drawings. He wants to leave the Reservation, and his past.  CONNECTIONS TO THE THEME  Sonny does not embrace his Native American or white culture. Both embrace him. He leaves the Reservation, but also does not want to live with his method in his heritage and trains as a 'true running brave'.						
Literary device used in the connection → ☐ Irony ☐ Satire ☐ Parody ☒ Motivation ☐ Personification ☐ Symbolism ☐ Other Explanation  Many people motivate Sonny in his life. His Uncle Jake tries to bring him up as a Running Brave. Jake lets Sonny leave the Reservation, but later follows him to protect him. He encourages Sonny to work with a trainer to improve his boxing. Brooks is a police officer that becomes Sonny's friend, and father figure. He encourages Sonny to do the right thing.						
Description of an EVENT, CHARACTER, or SETTING  Sonny is befriended by drug dealers as soon as he gets off the bus in NYC. He is given cash to make runs for them, but does not know they are drugs. He gets caught and sent to prison where he connects to his heritage.		CONNECTIONS TO THE THEME  Sonny tries to find his identity with his friendship with Doll and Stick. He thinks they are accepting him for who he is when Stick is really using him. While in prison he refuses to let them cut his hair. He says, "I am Sonny Bear, a member of the Moscondaga Nation. This is how we wear our hair."				
Literary device used in the connection → Irony Satire Parody Motivation Personification Symbolism Other Explanation  Sonny's hair becomes a symbol to him of his heritage. When faced with having it cut off, he refuses and proudly says he is a member of the Moscondaga Nation. In prison he also turns to his art. He used his Styrofoam trays to draw. The art symbolizes Native American heritage of using whatever resources are available.						
CONCLUSION: Is the message important? Why?  Lagree with the story's the theme. You have to learn to be yourself and stop trying to be						

I agree with the story's the theme. You have to learn to be yourself and stop trying to be someone else just because others want you to.

## ...rather, we build up to it Thus, we don't start with something this complex... INTRODUCTION This is about. What was the message about life in the story? TOPIC of the story THEME of the story is (author's unstated opinion or message about the story's topic) STORY Description of an EVENT, CH TOPIC of the story THEME of the story is (author's unstated opinion or message about the story's topic) STORY Description of an EVENT, CHARACTER, Description of an EVENT, CH TOPIC of the story THEME of the story is (author's unstated opinion or message about the story's topic) Literary device used in the connection → Description of an EVENT, CHARACTER, or SETTING CONNECTIONS TO THE THEME Literary device used in the connection → Irony Satire Parody Motivation Personification Symbolism Other iterary device used in the connection → Satire Parody Motivation Personification Symbolism Other Literary device used in the connection → Irony Literary device used in the connection → Irony Satire Parody Motivation Personification Symbolism Other



# **Process Time**

### PAUSE AND THINK ABOUT WHAT YOU'VE HEARD

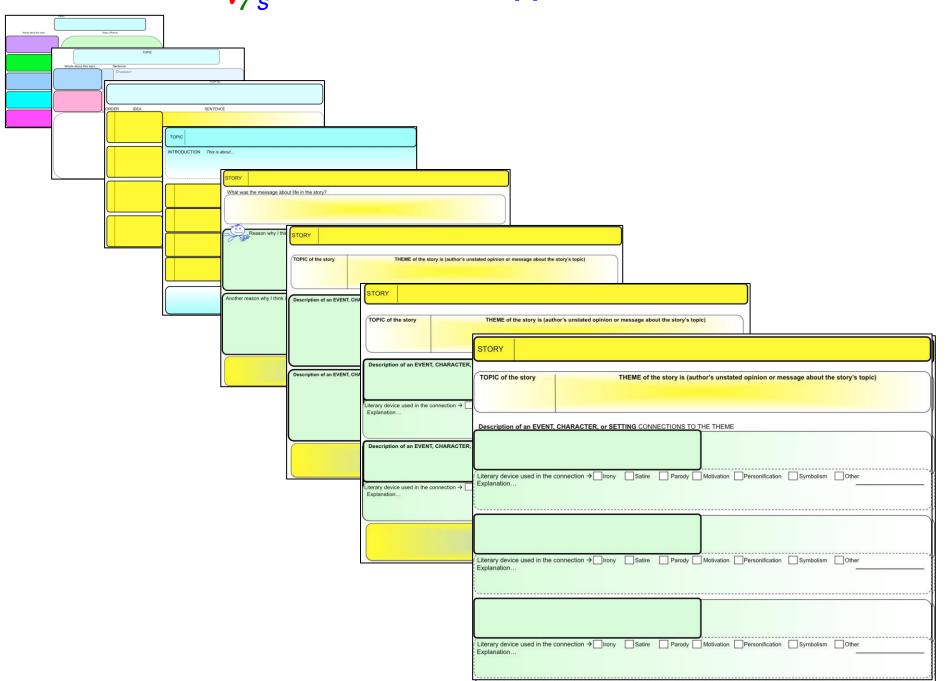
With your elbow partner...

- paraphrase Key Idea #4 to each other
- clarify and / or question

With larger group...

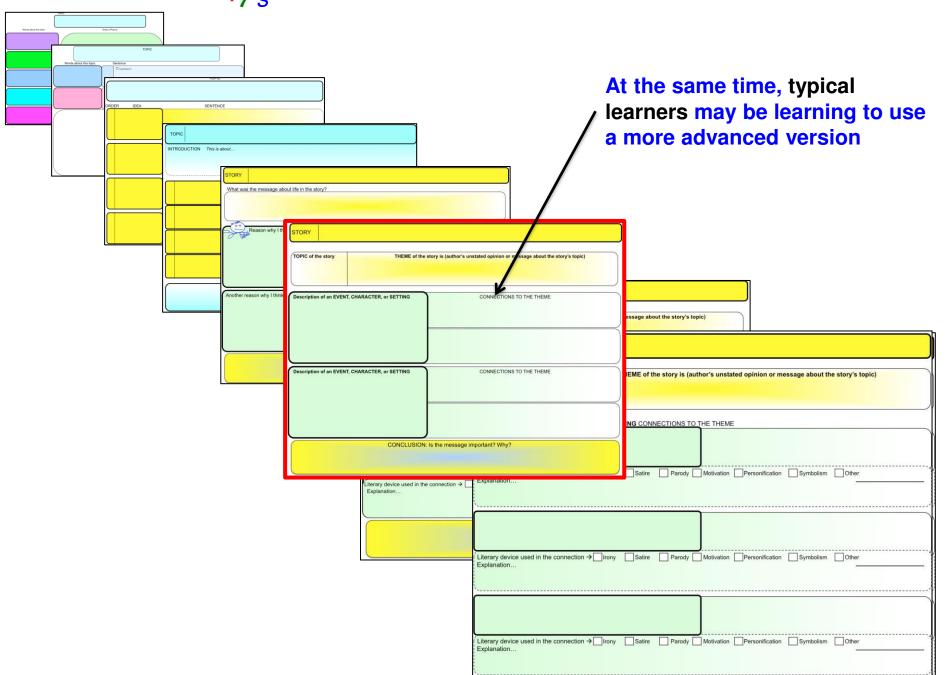
- share your thoughts
- ask clarifying questions

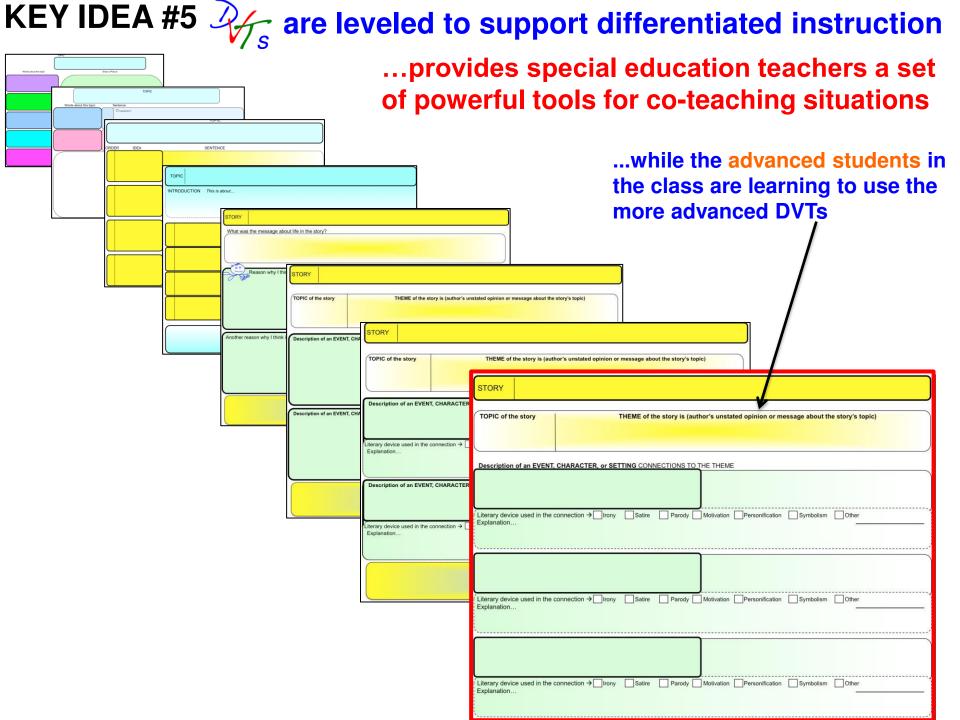
KEY IDEA #5 are leveled to support differentiated instruction



KEY IDEA #5 are leveled to support differentiated instruction Some struggling learners in a classroom may be learning to use this DVT because it matches their developmental levels INTRODUCTION This is about THEME of the story is (author's unstated opinion or message about the story's topic STORY Description of an EVENT, CHARACTER TOPIC of the story THEME of the story is (author's unstated opinion or message about the story's topic) Literary device used in the connection -> Description of an EVENT, CHARACTER, or SETTING CONNECTIONS TO THE THEME Literary device used in the connection → Irony Satire Parody Motivation Personification Symbolism Other Explanation. iterary device used in the connection > Literary device used in the connection → Irony Satire Parody Motivation Personification Symbolism Other Literary device used in the connection → Irony Satire Parody Motivation Personification Symbolism Other

KEY IDEA #5 are leveled to support differentiated instruction







# **Process Time**

### PAUSE AND THINK ABOUT WHAT YOU'VE HEARD

With your elbow partner...

- paraphrase Key Idea #5 to each other
- clarify and / or question

With larger group...

- share your thoughts
- ask clarifying questions

Define the issue	. Ellis Ali Rights Reserved
WHAT is the issue?	
WHO should be concerned about the issue? WHY?	
WHEN did the issue emerge? Why then?	
Establish a clear position on the issue	
My position is	
Back-up the position with reasons and supporting	g facts (weakest reason 1st, strongest reason last)
REASON	Supporting facts
REASON	Supporting facts
Acknowledge the opposition's position	
Opposition's position is	
Tell why the opposition's position is incorrect (their	strongest reason 1st their weakest reason last)
REASON opposition might give	Why this reason is faulty
REASON opposition might give	Why this reason is faulty

### Define the issue

WHAT is the issue?

Whether to raise the speed limit on interstates

WHO should be concerned about the issue? WHY?

Everybody that travels or buys goods shipped via highways

WHEN did the issue emerge? Why then?

Pres. Carter ordered slower speed-limits due to gas shortage

# Define the issue

WHAT is the issue?

WHO should be concerned about the issue? Why? WHEN did the issue emerge? Why then?

⊬	cknowledge	the	opposition's	position

Opposition's position is...

ı	ell v	vhv the	opposition's	position is	incorrect	(their strongest reason 1st	. their weakest reason las
---	-------	---------	--------------	-------------	-----------	-----------------------------	----------------------------

REASON opposition might give...

Why this reason is faulty...

REASON opposition might give..

Why this reason is faulty.

© 2013 Edwin S. Ellis All Rights Reserved  Define the issue					
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WHEN did the issue emerge? Why then? Pres. Carter ordered slower speed-limits due to gas shortage					
Establish a clear position on the issue					
The speed limit should be lowered to 65mph on interstates					
stablish a clear position on the issue  My position is					
Acknowledge the opposition's position  Opposition's position is					
ell why the opposition's position is incorrect (their strongest reason 1st, their weakest reason last)					

Why this reason is faulty...

End by re-stating your position and summarizing the most important reason why

REASON opposition might give...

Define the issue

Whether to raise the speed limit on interstates

Everybody that travels or buys goods shipped via highways

WHEN did the issue emerge? Why then?

Pres. Carter ordered slower speed-limits due to gas shortage

Establish a clear position on the issue

My position is...

The speed limit should be lowered to 65 on interstates

Back-up the position with reasons and supporting facts (weakest reason 1st, strongest reason last)

Slower speed = less gas

REASON

**REASON** 

Safer at lower speeds

Supporting facts

"greener" + less travel & shipping costs

Supporting facts

Slower speed = less wrecks = less deaths

ack-up position with reasons & supporting facts Weakest reason 1st Strongest reason last

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REASON

Supporting facts

Slower speed = less gas

"greener" + less travel & shipping costs

REASON

Supporting facts

Safer at lower speeds

Slower speed = less wrecks = less deaths

Acknowledge the opposition's position

Opposition's position is...

We should raise the speed limit to 75 or 80, not lower it!

Acknowledge the opposition's position Opposition's position is.... Define the issue

Whether to raise the speed limit on interstates

Everybody that travels or buys goods shipped via highways

Pres. Carter ordered slower speed-limits due to gas shortage

Establish a clear position on the issue

My position is...

The speed limit should be lowered to 65 on interstates

Back-up the position with reasons and supporting facts (weakest reason 1st, strongest reason last)

Slower speed = less gas

"greener" + less travel & shipping

ell why opposition's position is incorrect Reason opposition might give... Why this reason is faulty...

ell why the opposition's position is incorrect (their strongest reason 1st, their weakest reason last)

REASON opposition might give...

Why this reason is faulty...

Cars made safer now

105,000 fatal car accidents last year

People won't speed as much if speed limit is higher

Research: Drivers ave. speed = 15-20 mph over limit no matter what speed limit is

Define the issue

WHAT is the issue?

Whether to raise the speed limit on interstates

WHO should be concerned about the issue? WHY?

Everybody that travels or buys goods shipped via highways

WHEN did the issue emerge? Why then?

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Establish a clear position on the issue

My position is...

The speed limit should be lowered to 65 on interstates

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REASON

Supporting facts

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"greener" + less travel & shipping costs

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Supporting facts

Safer at lower speeds

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We should raise the speed limit to 75 or 80, not lower it!

End by re-stating your position & summarizing the most important reason why

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DE

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WHEN did the issue emerge? Why then?

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My position is...

## The speed limit should be lowered to 65 mph on interstates

Back-up the position with reasons and supporting facts (weakest reason 1st, strongest reason last)

REASON

Slower speed = less gas

REASON

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People won't speed as much if speed limit is higher

Why this reason is faulty...

105,000 fatal car accidents last year

Research: Drivers ave. speed = 15-20 mph over limit no matter what speed limit is

**Interstate Speed Limits** 

An important issue that concerns everyone is whether the speed limit on interstate highways should be raised. It affects everyone, even children too young to drive and elderly people too old to drive. This is because so many people travel on the interstates, both as drivers and as passengers. It even affects people who never go on the interstate because the speed limit affects the price of goods in terms of their transportation costs. Long ago, President Carter ordered that the speed limit be dropped to 55 miles per hour. This has been raised back to 70 mph on most interstates, but this may not be the ideal speed.

Personally, I think the speed limit should be lowered to End by re-stating your position and summarizing the most important reason why 65 mph on interstates. Slowing down just a few miles an hour can save this country a lot of gas because slower speeds burn less gas. Not only will people save at the gas pump, they will save in the grocery store as well because it will not require as much money to ship items if truckers go a little slower.

Most importantly, however, slightly slower speeds can save thousands of lives. According to the National Insurance Council, dropping the speed limit just 5 mph can save as many as 35,000 lives per year. The bottom line is that we are all safer if we all slow down just a little. Slower speeds mean less wrecks and that means less deaths.

There are many people who would like to see the speed limit increased to 75 or even 80 mph on the interstates. They argue that, now that cars have air bags and other safety features, they are a lot safer than they once were and thus are safer to drive at higher speeds. However, according to Laws.com (http://accident.laws.com/fatal-accidents), 105,000 people died in auto-accidents last year. While cars may be safer, that doesn't make them completely safe.

Some also argue that if the speed limit were raised, drivers would be less likely to exceed speed limits and break the law. The reality is that statistics show that drivers are likely to exceed the speed limit an average of 10-15 mph, no matter what the limit is. Thus, when the speed limit is at 70, speeders are actually driving between 80-85 miles an hour. If the limit is raised to 75, they are likely to just drive even faster at 85-90 miles an hour, suck up even more gas and kill more people. While I agree that it is more fun to drive fast, it is more important to lower emissions and protect our planet, be less dependent on gas, and be safer. Let's lower the limit to 65 and we'll all be better off.

**DEBATE the Issue Strategy** Define the issue Whether to raise the speed limit on interstates Everybody that travels or buys goods shipped via highways Pres. Carter ordered slower speed-limits due to gas shortage The speed limit should be lowered to 65 on interstates Back-up the position with reasons and supporting facts (weakest n Slower speed = less gas 'greener" + less travel & shipping costs Slower speed = less wrecks = less deaths Safer at lower speeds Acknowledge the opposition's position We should raise the speed limit to 75 or 80, not lower it! Tell why the opposition's position is incorrect (their Cars made safer now 105,000 fatal car accidents last year People won't speed as much if Research: Drivers ave, speed = 15-20 mph speed limit is higher





The Science DVTs target ACT College Readiness Standards and Next Generation Science Standards

The History DVTs target ACT College Readiness Standards and NGSS History & Social Studies standards





### For example, in middle school...

### **SCIENCE**

high-frequency topics by science content standards

**Phenomena** 

**Procedures** 

Discovery

**Life Forms** 

**Structures & Systems** 

Theory

**Experiments** 

Research

"High Frequency" means that it is highly likely that any given science lesson will be *mostly* about one of these topics





### For example, in middle school...

**SCIENCE** 

high-frequency topics by science content standards

Each topic has a set of DVTs designed to address its generative essential understandings & thinking patterns

**Phenomena** 

**Procedures** 

**Discovery** 

**Life Forms** 

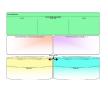
Structures & Systems

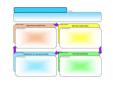
Theory

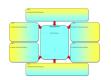
**Experiments** 

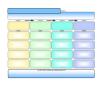
Research

**IMPORTANT!** 



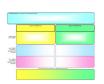


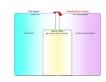


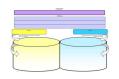


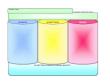












The Phenomena DVTs are different than the Theory DVTs because their generative essential understandings are different and the thinking patterns for understanding each are different

Thus, DVTs are differentiated by complexity, by discipline, by literacy & content standards, by generative essential understandings, and by thinking patterns





### For example, in middle school...

**SCIENCE** 

high-frequency topics by

science content standards

Each topic has a set of DVTs designed to address its generative essential understandings & thinking patterns

### Phenomena

**Procedures** 

Discovery

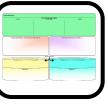
**Life Forms** 

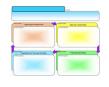
Structures & Systems

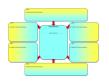
Theory

**Experiments** 

Research











The next slide provides an example of a Phenomenon DVT

Thus, DVTs are differentiated by complexity, by discipline, by literacy & content standards, by generative essential understandings, and by thinking patterns

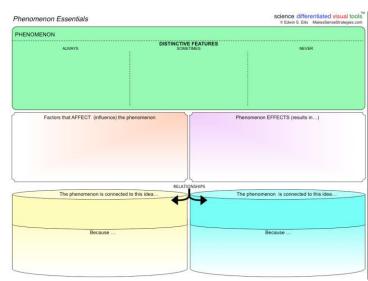
# Phenomenon Essentials ASN

## **CCSS Standards targeted by this DVT...**

### **Reading Science**

<u>CCSS.ELA-Literacy.RST.6-8.1</u> Cite specific textual evidence to support analysis of science and technical texts.

<u>CCSS.ELA-Literacy.RST.6-8.2</u> Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.



### **Reading Information Text**

<u>CCSS.ELA-Literacy.RI.6.2</u> Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

<u>CCSS.ELA-Literacy.RI.7.3</u> Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

#### **WRITING**

### CCSS.ELA-LITERACY.WHST.6-8.2

Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.



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#### **PHENOMENON**

## Laws of Thermodynamics

#### ALWAYS

Energy and matter are always entering and leaving organism systems and chemical reactions.

Heat energy is lost in every reaction

#### **DISTINCTIVE FEATURES**

**SOMETIMES** 

Molecules and compounds are rearranged to drive reactions.

Energy is either stored or released in most reactions

#### NEVER

Energy and matter are never created or destroyed in any reaction.

#### Factors that AFFECT (influence) the phenomenon

The level of organization in an organism or system drives energy or heat transfer.

Highly organized systems will spontaneously fall apart without the constant input of more energy.

Phenomenon EFFECTS (results in...)

The Laws of Thermodynamics result in the gradual but consistent breakdown of matter into its simplest form.

Without these laws, organisms would have no need to create or consume energy compounds.

#### **RELATIONSHIPS**

The phenomenon is connected to this idea...

### Photosynthesis

Because...

Sunlight is captured and converted into chemical compounds.

Energy is stored at each step of Photosynthesis to BUILD organic compounds.

The phenomenon is connected to this idea...

### Cell Respiration

Because...

Organic compounds are BROKEN down, releasing energy at every step.

This process eventually recycles the components assembled in photosynthesis.





### For example, in middle school...

**SCIENCE** high-frequency topics by

science content standards

Each topic has a set of DVTs designed to address its generative essential understandings & thinking patterns

**Phenomena** 

**Procedures** 

**Discovery** 

**Life Forms** 

Structures & Systems

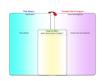
Theory

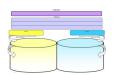
**Experiments** 

Research











# The next slide provides an example of a Theory DVT

Thus, DVTs are differentiated by complexity, by discipline, by literacy & content standards, by generative essential understandings, and by thinking patterns

**THEORY** name

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## **Evolution by Natural Selection**

Is supposed to explain how or why...

Natural events such as environmental fitness, reproductive fitness, and inter-specific competition favor some organism's survival in a given environment.

Key Feature of the Theory

Key Feature of the Theory

Differential Reproduction

Key Feature of the Theory Inter-specific Competition

Differential Survival

Details, Examples and/or Evidence of Feature

Details, Examples and/or Evidence of Feature

Details, Examples and/or Evidence of Feature Opposable thumb in primates that benefits tool use; allows species to manipulate their

An organism must be 'fit' enough to survive in its environment long enough to reach sexual maturity.

Two species cannot exist in the same place at the same time without competing for resources.

Level of lipid insulation in seals and penguins: Any seal with lower than expected fatty layers may not live well or very long.

environment

Those organisms who can survive to reproductive age have a greater chance of passing on their own genes.

Competition favors the strong and well-suited organisms. The winners have greater chances to reproduce.

Impact and/or Practical Applications of Theory

Natural selection can be called survival of the fittest.

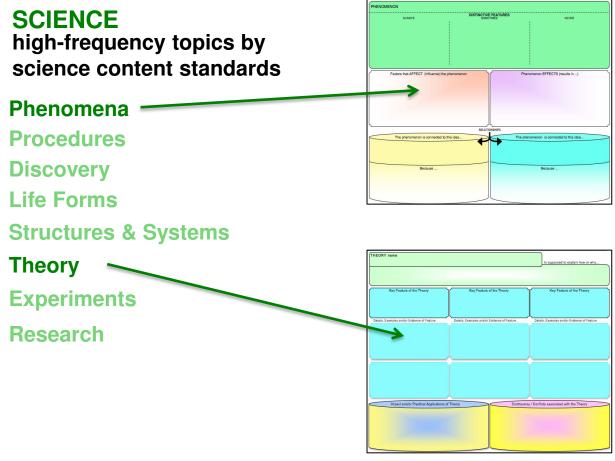
Organisms who struggle to survive will be eliminated from the environment or fail to reproduce, limiting the transfer of their genes. Controversy / Conflicts associated with the Theory

Evolution clashes with religious principles: Creation vs. The Big Bang Theory





## For example, in middle school...



Both the visual design and the prompts differ in these **DVTs** because the generative essential understandings and thinking patterns associated with each topic differ

Thus, DVTs are differentiated by complexity, by discipline, by literacy & content standards, by generative essential understandings, and by thinking patterns





### For example, in middle school...

**SCIENCE** 

high-frequency topics by science content standards

Phenomena

**Procedures** 

Discovery

**Life Forms** 

**Structures & Systems** 

Theory

**Experiments** 

Research

HISTORY

high-frequency topics by history content standards

**People** 

**Event** 

Idea / Ideology

Issue / Conflict

**Era or Movement** 

**Structures & Systems** 

Policy / Law

**Process** 

The next slide is an example of a History DVT that focuses on **People** 

Be sure to notice how the People DVT addresses Core literacy standards (e.g., providing text evidence of key ideas and making comparisons

...while at the same time, addresses a key history content standard ( impact of specific U.S. presidents)

### PERSON COMPARISONS

Summarize central ideas distinct from prior knowledge or opinions / Describe how a text presents (comparison) information

differentiated visual tools history

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### **PERSON** Thomas Jefferson (Anti-Federalist)

### **PERSON** James Madison (Federalist)

**PFRSONAL** QUALITIES Displayed perseverance

Constitution

- •Believed in education founded College of Virginia
- •Innovative Created a way to copy his letters and notes
- \* Owned slaves yet wrote "All men are created equal" in Declaration of Independence
- Intelligent Courageous
- Determined

• To pass the Constitution • To unify the colonies

**GOALS** 

**ACTIONS** 

**IMPACT** 

- To secure personal rights and freedoms from the government for the citizens • Limit the power of the government
- Gathered support to block the ratification of the
- Negotiated the first 10 amendments, known as the Bill of Rights
- Impact was being the primary author of Declaration of Independence - set the stage for establishing a democratic government "of the people, by the people"
- Looked for ways to appease the colonists in order to get the Constitution passed

\* Wanted a strong (powerful) central government

 Allowing the Bill of Rights, the Constitution was ratified

By working to create the U.S. Constitution, Madison transformed ideas into a set of specific structures, laws, and processes for a "balance of powers"

So what? What is important to understand about this?

The two used their individual differences in opinion to secure the personal rights and freedoms of citizens as well as provide a sense of protection from the government.





### For example, in middle school...

SCIENCE

high-frequency topics by science content standards

Phenomena

**Procedures** 

Discovery

**Life Forms** 

Structures & Systems

Theory

**Experiments** 

Research

HISTORY

high-frequency topics by history content standards

People

**Event** 

Idea / Ideology

**Issue / Conflict** 

**Era or Movement** 

Structures & Systems

Policy / Law

**Process** 

The next slide is an example of a History DVT that focuses on a ERA or **MOVEMENT** 

## **MOVEMENT:** Goals \* Actions \* Impact

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		Edocinial Gridoridaning of Godin Gladio Griff (Turiotic)	Ellis, All Nights Neserveu Tublished by	Makes Jense Strategies, EEC, Northport, AE www.makesJenseStrategies.com	
MOVEMEN	NT Wo	men's Suffrage Movement (right	to vote)	Was about	
Getting women (and some men!) organized to fight for changing laws so they would have the right to vote – led by Susan. B. Anthony & Elizabeth B. Stanton					
When? 1869- 1920  CONTEXT: What was happening in history when the movement occurred? How is what was happening connected to the movement?  1869, 15 <sup>th</sup> Amendment granted black men the right to vote but not ANY women. Women were angry -Susan B. Anthony organized the NWSA to fight for equality in women's rights.					
	GOAL e movement	ACTIONS (how goal was transformed into an action)	IMPACT (what ha	appened as a result of the actions)	
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## **MOVEMENT:** Goals \* Actions \* Impact

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MOVEMENT   Women's Suffrage Movement (right to vote)   Was about					
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When? 1869- 1869, 15th Amendment granted black men the right to vote but not ANY women. Women were angry -Susan B. Anthony organized the NWSA to fight for equality in women's rights.					
ACTIONS (how goal was transformed into an action)  of the movement Allow women to vote in all elections  ACTIONS (how goal was transformed into an action)  Public speeches + organize supporters to implement widespread voting poll picketing; passing out flyers to voters;	IMPACT (what happened as a result of the actions)  Issue kept in the news - increase awareness of problem - slowly builds public support				
GOAL of the movement  ACTIONS (how goal was transformed into an action)	IMPACT (what happened as a result of the actions)				
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## **MOVEMENT:** Goals \* Actions \* Impact

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MOVEMENT

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Was about...

Getting women (and some men!) organized to fight for changing laws so they would have the right to vote – led by Susan. B. Anthony & Elizabeth B. Stanton

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of the movement

Allow women to
vote in all elections

ACTIONS (how goal was transformed into an action)
Public speeches + organize supporters
to implement widespread voting poll
picketing; passing out flyers to voters;

IMPACT (what happened as a result of the actions)

Issue kept in the news - increase
awareness of problem - slowly builds
public support

of the movement
Female
representation in
government

GOAL

ACTIONS (how goal was transformed into an action)
Organize women to demonstrate in
public- let politicians know how MANY
want things changed and how MUCH

IMPACT (what happened as a result of the actions)

Issue kept in the news - increased awareness of problem - slowly builds public support & pressure on policy

GOAL
of the movement

Educate women
about equal rights
with males

ACTIONS (how goal was transformed into an action)

Organize rallies, pass out flyers to get people to come; provide passionate speeches that recruit more participants

IMPACT (what happened as a result of the actions)

Convince women that they do not have equal rights and tell them they are not as intelligent as men

GOAL
of the movement
Increase women's

self-confidence

ACTIONS (how goal was transformed into an action)

Encouraged women to become economically independent – take advantage of strikes

IMPACT (what happened as a result of the actions)

Get men/husbands/fathers to keep their wives at home and not to let them work or earn money in any way





## target generative "essential understandings" of content standards within each discipline

## For example, in middle school...

SCIENCE

high-frequency topics by science content standards

Phenomena

**Procedures** 

Discovery

**Life Forms** 

Structures & Systems

Theory

**Experiments** 

Research

HISTORY

high-frequency topics by history content standards

People

**Event** 

Idea / Ideology

Issue / Conflict

**Era or Movement** 

**Structures & Systems** 

Policy / Law

**Process** 

The next slide is an example of a History DVT that focuses on a **PROCESS** 

# lights Reserved Published by Makes Sense Strategies, LLC, Northport, AL www.MakesSenseStrategies.com **PROCESS** Is about... When? Context: Situations leading to the development of the process? CONDITIONS necessary for the Positive and/or negative STEPS to the process process to take place IMPACT of the process Why is the process important?

#### PROCESS How a bill becomes a law

Is about...

the steps necessary to propose a change and create a law.

When? law is needed to solve a problem

Context: Situations leading to the development of the process?

There is a need for change or adaptation to make things better or more

modern for citizens.

STEPS to the process

An idea or "change" is proposed.

The idea is assigned to a committee and studied.

If the committee decides there is a need for the idea or change, it is sponsored and put to a vote.

If the bill passes, it goes to the other House and the process is repeated (studied, changes, approval, etc.)

Once both houses approve, it is sent to the President of the US. He has 10 days to sign, veto, or let it sit.

CONDITIONS necessary for the process to take place

Must be an need Must have majority approval of both Houses

- •If President vetoes, it dies unless Congress overrides with a 2/3 vote
- If it sits on President's desk for 10 days & Congress is in session, it passes. If they are not active, bill dies.

Positive and/or negative IMPACT of the process

Negative...

Inefficient, timeconsuming, personal interest become involved. Sometimes the end has nothing to do with how it was first proposed.

Positive Checks & balances system, potential for citizen involvement

Why is the process important?

The process keeps individuals from having too much power.





## target generative "essential understandings" of content standards within each discipline

## For example, in middle school...

**SCIENCE** 

high-frequency topics by science content standards

Phenomena

**Procedures** 

Discovery

**Life Forms** 

Structures & Systems

Theory

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Research

HISTORY

high-frequency topics by history content standards

People

**Event** 

Idea / Ideology

Issue / Conflict

**Era or Movement** 

Structures & Systems

Policy / Law

**Process** 

LITERATURE

high-frequency topics by literature content standards

Plot Analysis

**Character Analysis** 

**Setting Analysis** 

Theme Analysis

**Literary Devices Analysis** 

The next slide is an example of a Literature DVT that focuses on drawing inferences within the context of Character Analysis

#### Motivation Inferences

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text



literature DifferentiatedVisualTools.com

CHARACTER:

#### Sanger Rainsford

Brief description of the character's main GOALS...

At first, Rainsford is excited about the prospect of hunting with General Zaroff. Then, he finds out that he is going to be hunted by Zaroff.

#### **EXPLICT INFORMATION PROVIDED BY TEXT**

Based on the text clues, my INFERENCES about what motivated the character

CLUES about the character's PERSONALITY

Connections character's goals or actions

Who cares how the jaguar feels.

He has no compassion for the animals he hunts. (He does not put himself in another's position well.

Where there are pistol shots, there are men

Rainsford uses deductive reasoning to direct himself to a safer place than the sea

CLUES about the character's VALUES/BELIEFS about life or self

The world is made up of two classes—the hunters and the hunted. (p.1)

Connections character's goals or actions

Rainsford believes that he is strong and in the "hunter" class. (metaphorically, the hunters are the ones in control)

I have played the fox. Now I must play the cat of the fable.

Rainsford is a realist. He accepts that he must deal with being hunted.

CLUES about the character's **PRIOR EXPERIENCES** 

I've read your book about hunting snow leopards in Tibet. (p.13)

Not many men know how to make a Malay man-catcher. (p. 20)

Connections character's goals or actions

Rainsford wrote a book about hunting and is considered an expert.

Rainsford made this to try to fatally injure Zaroff. He uses his hunting and travel experiences to save himself from General Zaroff.

CLUES about the character's style of INTERACTING with OTHERS

The weather is making you soft. Be a realist. (p. 1)

I will agree to nothing of the kind. (p.18)

Connections character's goals or actions

Rainsford is condescending to his friend.

Rainsford will not agree to stay quiet about General Zaroff if he wins the game. He refuses to compromise his integrity.

#### My CONCLUSION about the character's motivation

General Zaroff began hunting at an early age, and he had no remorse about it. His father fed his desensitization toward pain and death of animals with praise for his marksmanship. Then, he killed people in warfare. His experiences created a belief that the world was made for only strong and victorious people. He feels justified in hunting humans, but we might infer that he is just feeding a terrible addiction.



## **Process Time**

#### PAUSE AND THINK ABOUT WHAT YOU'VE HEARD

With your elbow partner...

- paraphrase Key Idea #6 to each other
- clarify and / or question

With larger group...

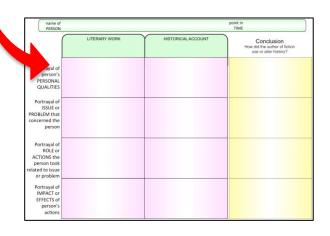
- share your thoughts
- ask clarifying questions

KEY IDEA #7

Senable teachers to SEE the structure for addressing unfamiliar complex standards in relatively simple, straight-forward ways.

Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history. Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

It's all about reducing cognitive load while watering-UP the curriculum



Define the issue or topic	
The same I tage addressed by the author AND any is a important.	4
Expose author's position (thesis) on the issue and/or purpose for addressing it	
he author's position on this lases / topic seems to be ANOINT Zoga euthor's purpose for enting about this issue seems to be	
Back-up the position with reasoning and/or supporting evidence	
teasoning and/or supporting evidence the author provided	
Adamuladas conflicties suidasso er shareshin idamodat	
Acknowledge conflicting evidence or alternative viewpoint That active recognic was as attended was at the sase of lags OR sadding evidence	
and white reclaims was an alternative view of the base or type OR confiding evidence  Target a response to the conflicting evidence or alternative viewpoint	
That surher inclusive was an allemative view of the lease or topic OR conflicting evidence	
and white reclaims was an alternative view of the base or type OR confiding evidence  Target a response to the conflicting evidence or alternative viewpoint	

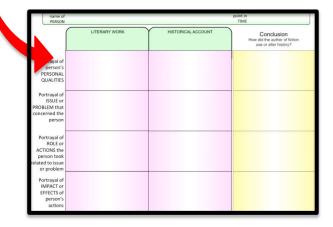
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Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

Define the issue or topic



cknowledge conflicting evidence or alternative viewpoint

For example...

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name of PERSON		point in TIME
	LITERARY WORK HISTORICAL ACCOUNT	Conclusion  How did the author of fiction  use or alter history?
Portrayal of person's PERSONAL QUALITIES		
Portrayal of ISSUE or PROBLEM that concerned the person		
Portrayal of ROLE or ACTIONS the person took related to issue or problem		
Portrayal of IMPACT or EFFECTS of person's actions		

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	name of PERSON	Henry M	point in 1st quarter of Queen Victoria's TIME reign	
LITERARY WORK <u>Dodger</u> by Terry Pratchett			HISTORICAL ACCOUNT <u>London Labour and the</u> <u>London Poor</u> by Henry Mayhew	Conclusion  How did the author of fiction  use or alter history?
p PER	rayal of erson's SONAL ALITIES	Opened home to mysterious girl He and his wife took care of her Interested in London's poorest Kind, compassionate Not rich, but not poor Generous	Friend of Charles Dickens Journalist, playwright, social researcher, and advocate of reform Co-founder of magazine <i>Punch</i> . Skilled storyteller	The author described him mainly as a caring and generous gentleman. He did not describe his other occupations such as playwright or journalist.
IS PROBLE concern		Wanted to improve conditions for London's poorest Concerned about lack of clean water, health care, rats, overflowing sewers	Many people flooded into London Very poor, harsh conditions Overflowing sewers and septic tanks Cholera and other diseases	The author described the conditions in London accurately according to historical accounts particularly the work by the real Henry Mayhew.
ACTIO perso related t	rayal of ROLE or DNS the on took to issue roblem	He and others had a project to make the government see how terrible conditions were in the city. Interviewed people about their living conditions and earnings	Used facts and statistics Walked around the streets chatting with orphans, street venders, prostitutes, etc to learn about conditions Wrote describing their lives	This was very similar to history. Henry Mayhew did write his books/articles based on his interviews with the real people of London.
IMP EFFE p	rayal of PACT or ECTS of erson's actions	His kindness to Simplicity helped save her life	His books/articles influenced many writers Gave a voice to London's poor The impact was immediate Raised money for the people he wrote about	The novel did not talk much about the impact that Henry had on the conditions of society.

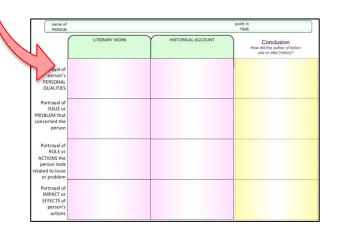
## **KEY IDEA #7**

Many of the Core literacy standards require content-area educators to teach skills not previously taught, and thus place considerable cognitive load on teachers in order to figure out effective ways to address them.

Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.

Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

Since the DVTs are individually designed to address specific literacy standards, they enable teachers to SEE the structure for how to address these standards in relatively simple, straight-forward ways.



SOURCE	
Define the issue or topic	
Somewhates the laser I floor addressed by the author AND only is a Important	1
Expose author's position (thesis) on the issue and/or purpose for addressing it	
The author's position on this bases / topic seems to be ANDOR Que submir's purpose for writing about this bases seems to be	
Back-up the position with reasoning and/or supporting evidence	
Resemp antire apporting evidence has as the provided  Act move ledge conflicting evidence or alternative viewpoint	
What survive Production was an assurance year or the disease or opposition continging exponence.	
Target a response to the conflicting evidence or alternative viewpoint	
for post appeting the attenuise viseoport or evidence that conflicts with the author's view AND may the author responded to the key point or conflicting evidence.	
See your seagating this alternative evergood or another that controls with the author's over AND tree the solver responded to the key point or conflicting evidence.	
Explain your conclusion	8888

For example...

## Author's Response to Conflicting Evidence

## **CCSS Standards targeted by this DVT...**

#### READING INFORMATION TEXT

CCSS.ELA-Literacy.RI.8.6 Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.



#### SOURCE Danielle Dellorto http://www.cnn.com/2011/HEALTH/05/31/who.cell.phones/

#### **D**efine the issue or topic

Summarize the issue / topic addressed by the author AND why is it important

Whether or not the radiation from cell phones causes multiple forms of brain cancers is really important because so many people use cell phones... a LOT! We could be poisoning ourselves.

#### Expose author's position (thesis) on the issue and/or purpose for addressing it

The author's position on this issue / topic seems to be... AND/OR The author's purpose for writing about this issue seems to be...

Danielle Dellorto wrote this article that claims cell phones cause brain cancer in order to warn the audience about these risks.

#### **B**ack-up the position with reasoning and/or supporting evidence

Reasoning and/or supporting evidence the author provided

Dellorto  $\rightarrow$  W.H.O. included mobile phones on "carcinogenic hazards" list (same category as lead, engine exhaust & chloroform). Dellorto quoted Dr. K. Black: "What microwave cell phone radiation does is similar to what happens to food in microwaves, essentially cooking the brain," Dellorto noted that head of a Un. Pitt cancer-research institute sent memo to all employees urging them to limit cell phone use b/c of possible cancer risks.

#### Acknowledge conflicting evidence or alternative viewpoint

What author indicated was an alternative view of the issue or topic OR conflicting evidence

Cell phone manufacturers claim cell phones to be safe when used away from the human body. BlackBerry Bold advises users to "keep the BlackBerry device at least 0.98 inch (25 millimeters) from your body when the BlackBerry device is transmitting."

#### Target a response to the conflicting evidence or alternative viewpoint

Key point supporting the alternative viewpoint or evidence that conflicts with the author's view AND How the author responded to the key point or conflicting evidence

Apple iPhone 4 User Manual says "users radiation exposure should not exceed FCC guidelines."

Dellorto recommends using speakerphone or wired headset to avoid contact with the head or body.

Key point supporting the alternative viewpoint or evidence that conflicts with the author's view AND How the author responded to the key point or conflicting evidence

The Wireless Association added that W.H.O. researchers "did not conduct any new research, but rather reviewed published studies." Dellorto

→ "The European Environmental Agency has pushed for more studies, saying cell phones could be as big a public health risk as smoking, asbestos and leaded gasoline."

#### Explain your conclusion

My conclusion is that the author (Dellorto) provided enough evidence to convince me to use headphones instead of putting the cell phone up to my ear. Maybe they cause brain cancer, maybe they don't, but why risk it when it's so easy to just use headphones?



## **Process Time**

#### PAUSE AND THINK ABOUT WHAT YOU'VE HEARD

With your elbow partner...

- paraphrase Key Idea #7 to each other
- clarify and / or question

With larger group...

- share your thoughts
- ask clarifying questions

KEY IDEA #8

 $\mathcal{H}_s$  are powerful tools for watering up the curriculum, but how educators teach with them is equally important.

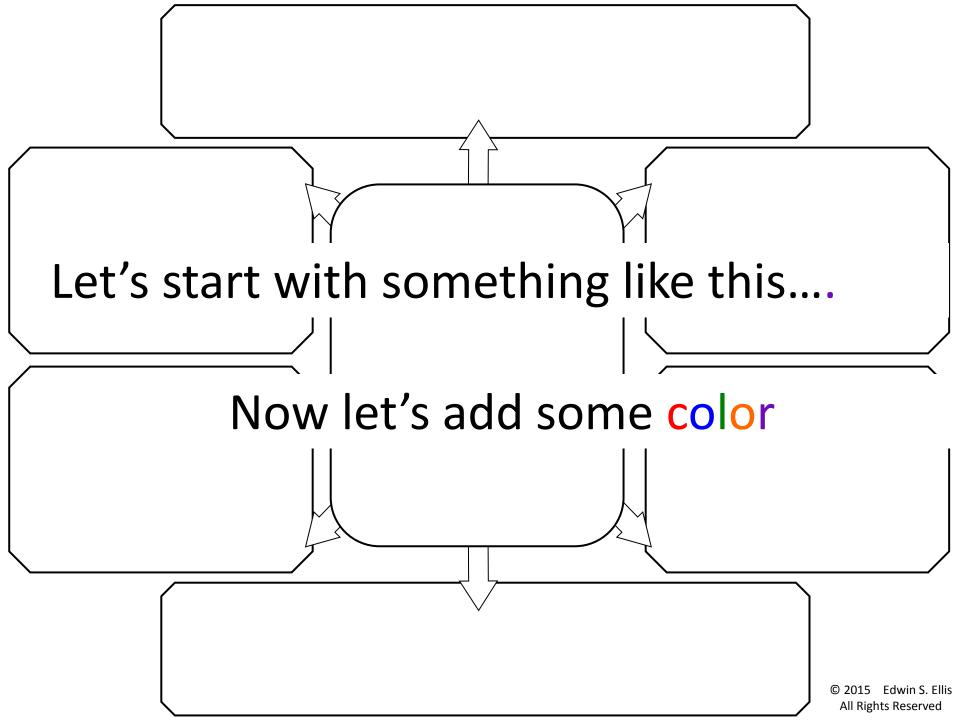
"Stratagems" for using DVTs effectively...

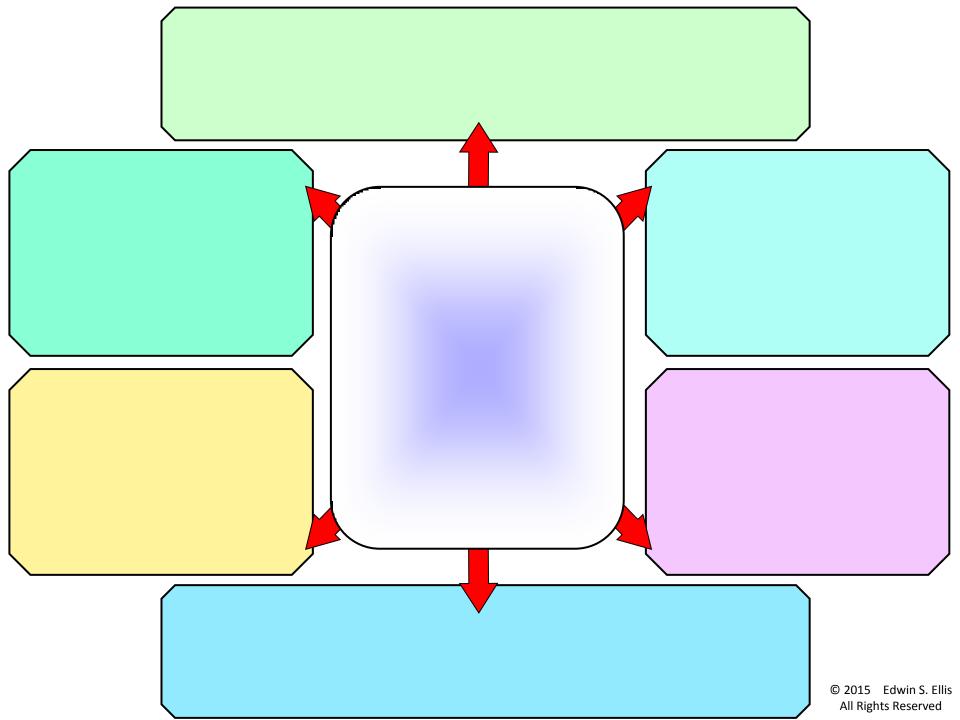
....BEFORE the lesson to review prior learning and/or preview or introduce essential questions that the lesson will address;

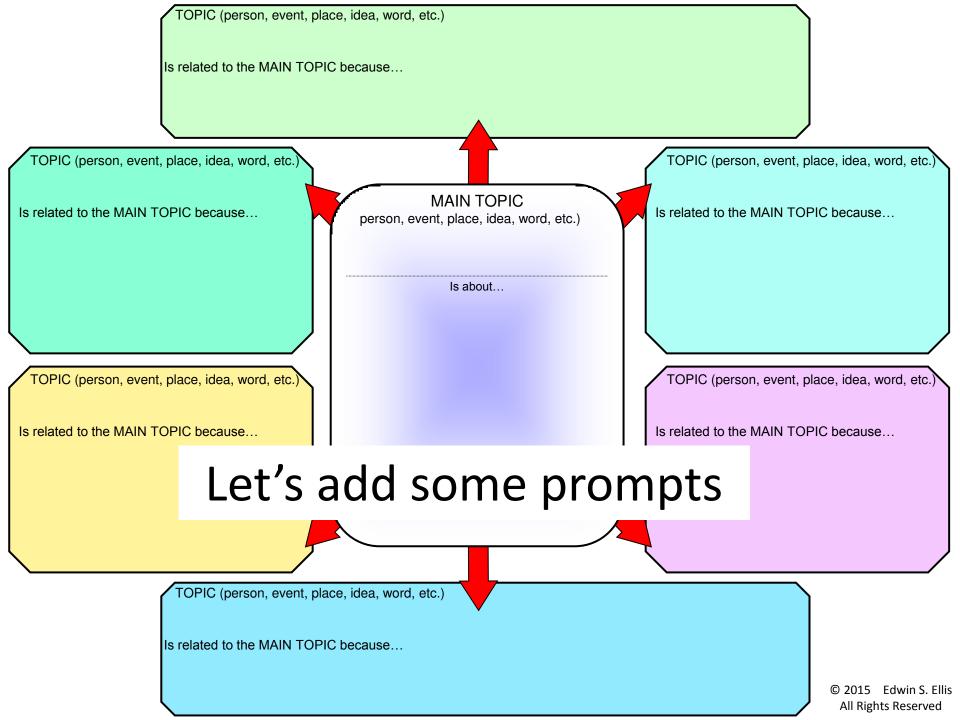
....DURING the heart of the lesson to provide clear, explicit instruction that is scaffolded (gradual release);

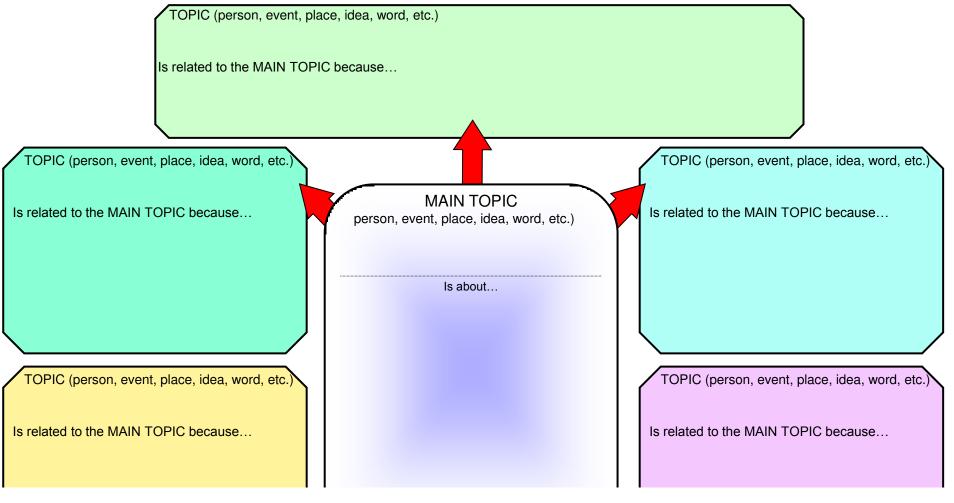
....AFTER the lesson to facilitate reflective reviews of essential understandings as well as essential questions.

The following slides illustrates the "Rotated Visuals" Stratagem









## WHAT IF...

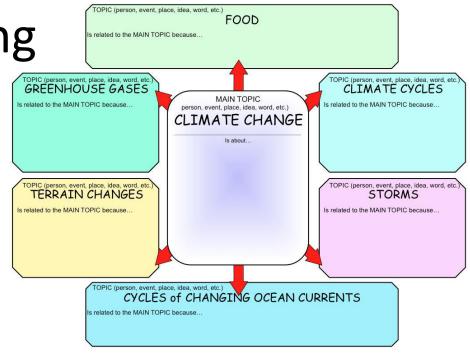
# The teacher identified the key terms for each topic?

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TOPIC (person, event, place, idea, word, etc.) FOOD Is related to the MAIN TOPIC because... TOPIC (person, event, place, idea, word, etc.) TOPIC (person, event, place, idea, word, etc.) GREENHOUSE GASES CLIMATE CYCLES **MAIN TOPIC** Is related to the MAIN TOPIC because... Is related to the MAIN TOPIC because... person, event, place, idea, word, etc.) CLIMATE CHANGE Is about... TOPIC (person, event, place, idea, word, etc.) TOPIC (person, event, place, idea, word, etc.) TERRAIN CHANGES STORMS Is related to the MAIN TOPIC because... Is related to the MAIN TOPIC because... TOPIC (person, event, place, idea, word, etc.) CYCLES of CHANGING OCEAN CURRENTS Is related to the MAIN TOPIC because... © 2015 Edwin S. Ellis All Rights Reserved

When could something like this be used?

Could students use this to plan an expository writing essay about "Climate Change."?



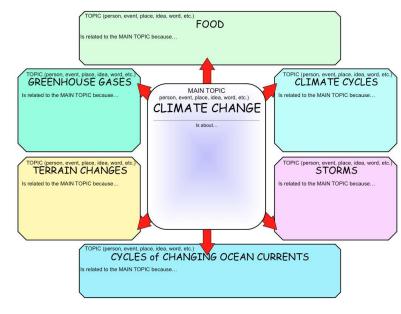
Could students use it to plan an in-class debate?

# When could something like this be used?

Could it be used at the BEGINNING of a lesson?

Review previously taught terms?

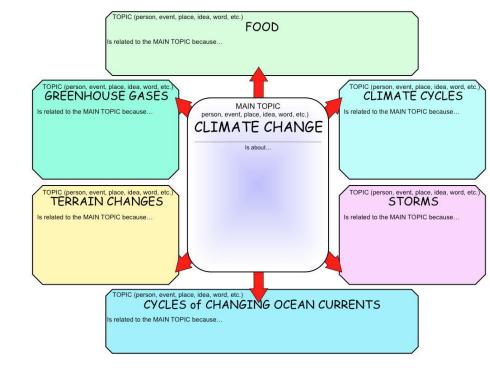
Pre-teach new terms?



## Could it be used DURING the lesson?

Guided Reading / Note-taking?

What about at the END of the lesson? Review new vocabulary?



What if, to review or anchor key terms taught during the lesson, you rotated the visual from team-to-team?

## Team adds one idea to the visual

TOPIC (person, event, place, idea, word, etc.)
GREENHOUSE GASES

Is related to the MAIN TOPIC because...

TOPIC (person, event, place, idea, word, etc.)
TFRRAIN CHANGES

Is related to the MAIN TOPIC because...

**MAIN TOPIC** 

person, event, place, idea, word, etc.)

## CLIMATE CHANGE

Is about...

Climate change is natural, but can be affected by humans (via pollution, producing methane, burning fossil fuels, etc.).

TOPIC (person, event, place, idea, word, etc.)

Is related to the MAIN TOPIC because...

TOPIC (person, event, place, idea, word, etc.)

Is related to the MAIN TOPIC because...

TOPIC (person, event, place, idea, word, etc.)

CYCLES of CHANGING OCEAN CURRENTS

Is related to the MAIN TOPIC because...

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Team adds one idea to the visual

Passes it to another team who then has to add something different...

TOPIC (person, event, place, idea, word, etc.)
TERRAIN CHANGES

Is related to the MAIN TOPIC because...

CLIMATE CHANGE

Is about...

Climate change is natural, but can be affected by humans (via pollution, producing methane, burning fossil fuels, etc.).

By 2100, average world temperatures predicted to increase 4-11 degrees.

TOPIC (person, event, place, idea, word, etc.) **STORMS** 

Is related to the MAIN TOPIC because...

TOPIC (person, event, place, idea, word, etc.)

CYCLES of CHANGING OCEAN CURRENTS

Is related to the MAIN TOPIC because...

Team adds one idea to the visual

Passes it to another team who then has to add something different...

Passes it to another team who then has to add <u>something</u> <u>different</u>...

#### CLIMATE CHANGE

Is about...

Climate change is natural, but can be affected by humans (via pollution, producing methane, burning fossil fuels, etc.).

By 2100, average world temperatures predicted to increase 4-11 degrees.

Changes will be slow, but will have a HUGE impact on things.

TOPIC (person, event, place, idea, word, etc.)

Is related to the MAIN TOPIC because...

TOPIC (person, event, place, idea, word, etc.)

CYCLES of CHANGING OCEAN CURRENTS

Is related to the MAIN TOPIC because...

Team adds *one* idea to the visual

Passes it to another team who then has to add something different...

Passes it to another team who then has to add <u>something</u> <u>different</u>...

## CLIMATE CHANGE

Is about...

Climate change is natural, but can be affected by humans (via pollution, producing methane, burning fossil fuels, etc.).

By 2100, average world temperatures predicted to increase 4-11 degrees.

Changes will be slow, but will have a HUGE impact on things.

TOPIC (person, event, place, idea, word, etc.)

Is related to the MAIN TOPIC because...

**ETC** 

TOPIC (person, event, place, idea, word, etc.)

CYCLES of CHANGING OCEAN CURRENTS

Is related to the MAIN TOPIC because...

Each time the visual is received from the previous team, the new team has to review what everybody else has already noted on it, and then think about and discuss what they could add to it that would be different, but important... and then note the idea using very concise words.

TOPIC (person, event, place, idea, word, etc.)

FOOD

Is related to the MAIN TOPIC because...

At same time population is exploding, food may become more

team, the new team has to review what everybody else has already noted on it, and then think about and discuss what they could add to it that would be different, but important... and then note the idea using very concise words.

Melting arctic ice = rise in sea levels. Some lush areas may convert to deserts = top soil blown away = less farming & less oxygen produced temperatures predicted to increase 4-11 degrees.

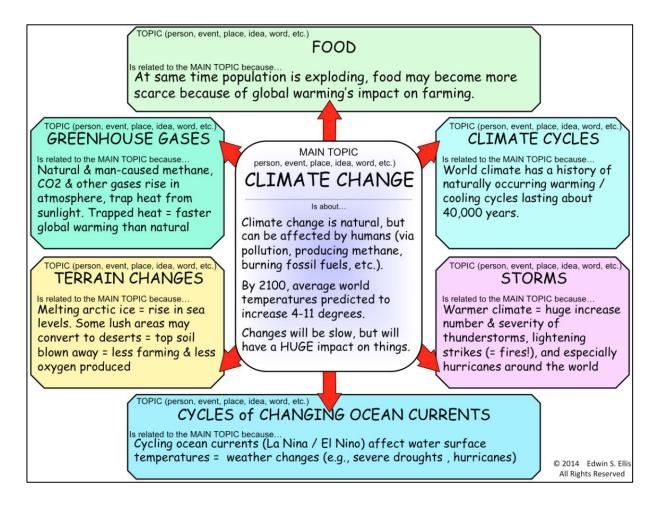
Changes will be slow, but will have a HUGE impact on things.

Varmer climate = huge increase number & severity of thunderstorms, lightening strikes (= fires!), and especially hurricanes around the world

TOPIC (person, event, place, idea, word, etc.)

## CYCLES of CHANGING OCEAN CURRENTS

Is related to the MAIN TOPIC because...
Cycling ocean currents (La Nina / El Nino) affect water surface
temperatures = weather changes (e.g., severe droughts , hurricanes)



The "Rotated Visuals Stratagem" is one of a series of powerful DVT instructional routines designed for teaching BEFORE, DURING, and AFTER a lesson.



## **Process Time**

#### PAUSE AND THINK ABOUT WHAT YOU'VE HEARD

With your elbow partner...

- paraphrase Key Idea #8 to each other
- clarify and / or question

With larger group...

- share your thoughts
- ask clarifying questions

## **Bottom LINE?**

## **DVTs** have demonstrated effectiveness with

- \* Low achieving students
- \* Low achieving students with learning disabilities
- \* Typical achieving students
- \* High achieving students

DVT-based instruction raises test scores in low-, typical-, and high-performing schools

Teachers and students like and value DVTs - both groups view DVTs as teaching/learning tools that significantly REDUCE COGNITIVE LOAD

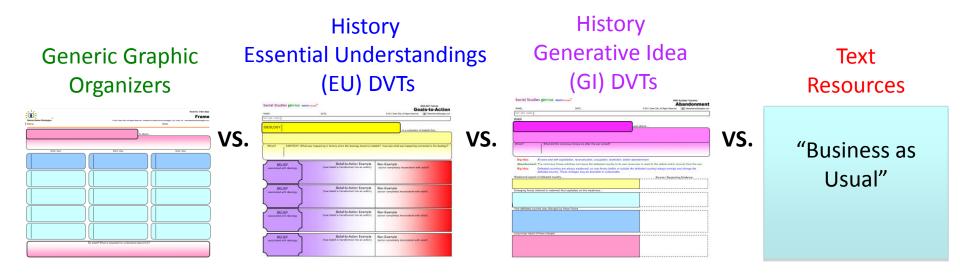
The following slides provide a brief overview of specific studies. To read more about DVT theoretical basis and research, see...

Ellis, E.S., Wills, S, & Deshler, D. (2011). Toward validation of the Genius Discipline-specific Literacy Model. <u>Journal of Education</u>, 191 (1), 13-32.

## **KEY IDEA #9**



## This study compared the relative impact of....



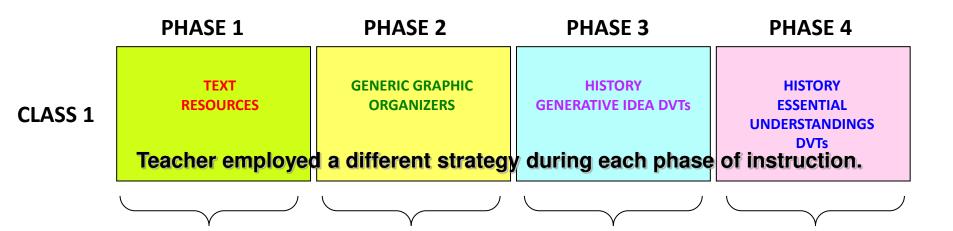
...on depth, breadth, and accuracy of new history knowledge

96 11<sup>th</sup> grade students...

32 high-achieving, 32 typical achieving, 16 low-achieving, & 16 low-achieving w/ LD

## **KEY IDEA #9**





Pre & Post measures of students'

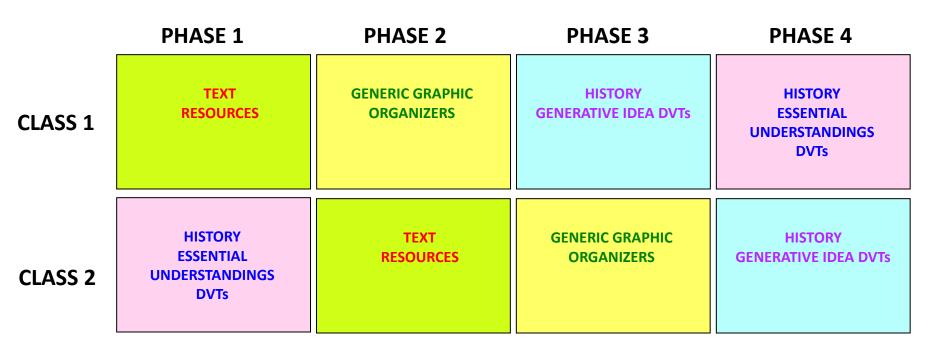
Breadth of knowledge

Depth of knowledge

Accuracy of knowledge

Learning measured for each phase





## 2nd teacher used same strategies, but in a different order



	PHASE 1	PHASE 2	PHASE 3	PHASE 4
CLASS 1	TEXT RESOURCES	GENERIC GRAPHIC ORGANIZERS	HISTORY GENERATIVE IDEA DVTs	HISTORY ESSENTIAL UNDERSTANDINGS DVTs
CLASS 2	HISTORY ESSENTIAL UNDERSTANDINGS DVTs	TEXT RESOURCES	GENERIC GRAPHIC ORGANIZERS	HISTORY GENERATIVE IDEA DVTs
CLASS 3	HISTORY GENERATIVE IDEA DVTs	GENERIC GRAPHIC ORGANIZERS	TEXT RESOURCES	HISTORY ESSENTIAL UNDERSTANDINGS DVTs
CLASS 4	GENERIC GRAPHIC ORGANIZERS	HISTORY ESSENTIAL UNDERSTANDINGS DVTs	HISTORY GENERATIVE IDEA DVTs	TEXT RESOURCES



## depth / breadth / accuracy of knowledge



**AVOVA statistical analysis** 

**Tukeys Post Hoc Analysis** 

	High Achieving		ypical hieving	Low Achieving	Learning Disabilities
Generic Graphic Organizers  31	d				
Differentiated Essential 15	t	EU DVTs — superior to → GI DVTs		Ts	
Tools Understanding DV		EU DVTs	— supe	rior to <del></del>	ional
ifferentiated Generative Ideas Tools DVTs 21	nd	Generic GOs	— supe	rior to <del></del>	ional
Traditional Discussion / Guided Note Taking 41	h Sar	ne resu	lts, regai	dless of stud	lent- type



EU DVTs had the greatest impact on all students depth of relational understanding.

## **KEY IDEA #9**



## depth / breadth / accuracy of knowledge



	High Achieving	Typical Achieving	Low Achieving	Learning Disabilities
Generic Graphic Organizers  2nd	EU	DVTs — supe	rior to> GI DV	Ts
Jifferentiated Essential 1St Jools Understanding DVTs		neric sune	rior to> Tradit rior to> GI DV	
Differentiated Generative Ideas Fools DVTs 3rd		neric sune	rior to -> Tradit	tional
Traditional Discussion / Guided Note Taking 4th	Same i	esults, regar	dless of stud	lent- type



Again... EU DVTs had the greatest impact on <u>all</u> students breadth of relational understanding.

## **KEY IDEA #9**



## depth / breadth / accuracy of knowledge



	High Achievi		Typical Achieving	Low Achieving	Learning Disabilities
Generic Graphic Organizers					
Differentiated Essential					
Differentiated Essential  Tools Understanding DVTs		nc	significant o	differences	
ifferentiated Generative Ideas					
Jifferentiated Generative Ideas Tools DVTs					
Traditional Discussion / Guided Note Taking					

In other words, on measures of accuracy of new knowledge, each treatment worked equally

**32 High Achieving** 



## Amount of new knowledge

	WEEK 1	WEEK 2
Teacher A	Teaches 1 <sup>st</sup> mini-unit using traditional guided note-taking / discussion instruction	Teaches 2nd mini-unit using History EU DVts  Differentiated Fiscal Fools
Teacher B	Teaches same 1 <sup>st</sup> mini-unit using History EU DVts  Wifferentiated Fiscals	

Changes in students' knowledge about the mini-unit topic are measured at end of each mini-unit

32 Low Achieving

16 Students w/LD

32 Typical Achieving

## **KEY IDEA #9**

**32** High Achieving



WFFK 2

16 Students w/LD

## Amount of new knowledge

WEEK 1

**32 Typical Achieving** 

	AACEN T	VVEEN Z
Teacher A	Teaches 1 <sup>st</sup> mini-unit using traditional guided note-taking / discussion instruction	Teaches 2nd mini-unit using History EU DVts  Wifferentiated Fiscal Fools
Teacher B	Teaches same 1 <sup>st</sup> mini-unit using History EU DVts  Wifferentiated Fisher	Teaches same 2nd mini-unit using traditional guided note-taking / discussion instruction

Changes in students' knowledge about the mini-unit topic are measured at end of each mini-unit

**32 Low Achieving** 

**Traditional Instruction** 

**DVT-based Instruction** 

**Traditional Instruction** 

**DVT-based Instruction** 

**Traditional Instruction** 

**DVT-based Instruction** 

**Traditional Instruction** 

**Achievers** 

Achievers w/LD

**Achievers** 

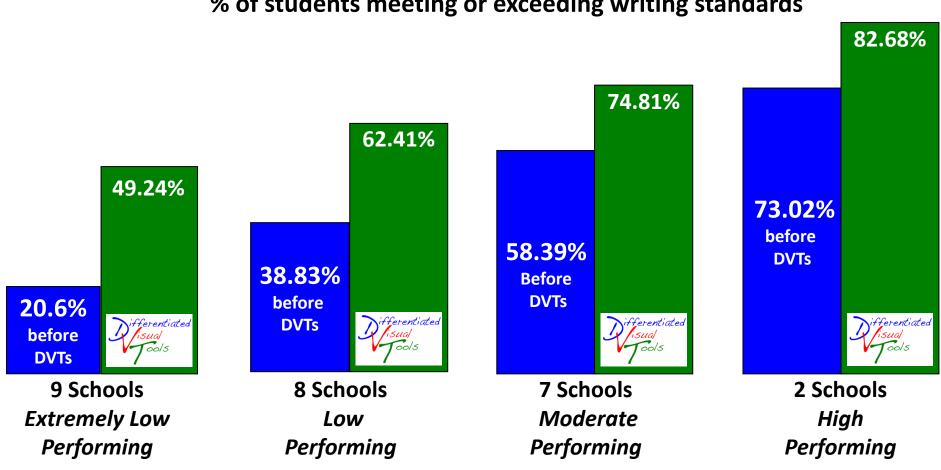
**Achievers** Typical

Low



## Impact on writing assessment across schools with different performance histories

% of students meeting or exceeding writing standards



## Semi-rural 5th grade Alabama Writing Assessment

## % students meeting or exceeding standards

		ifferentiated		
	Year 1	Year 2	Year 3	Year 4
	Busine	ess-as-usual	DVTs impl	ementation
School #1	36.1	28.08	51.43	81.0
			+ 23 pts.	+30 pts.
School #2	22.0	10.0	62.24	71.0
3011301 112			+ 52 pts.	+ 9 pts.

## **ELEMENTARY**

### **DVT** software programs

K-3 DVTs for Reading and Writing about Literature and Information Text Core Standards

3-5 DVTs for Reading and Writing about Literature and Information Text Core Standards

K-5 Vocabulary DVTs

DVTs in the Elementary strand are also appropriate for use when teaching struggling learners in secondary schools

## **SECONDARY**

#### **DVT** software programs

Science DVTs for Teaching College Readiness Standards

Literature DVTs for Teaching College Readiness Standards

History DVTs for Teaching College Readiness Standards

6-12 Vocabulary DVTs

#### COURSE-SPECIFIC DVTs

Eng 9-10 DVTs

Eng 11-12 DVTs (under development)

Algebra DVTs (under development)

**Biology DVTs** (under development)

**Civics DVTs** (under development)

Geography DVTs (under development)

## Visualizing Disciplinary Thinking

# 10 KEY IDEAS about



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