Teen Brains

Argument Mini-Unit

PowerPoint adapted from materials developed by Beth Rimer, Ohio Writing Project, for the National Writing Project i3 College Ready Writers Program, funded by the Department of Education.

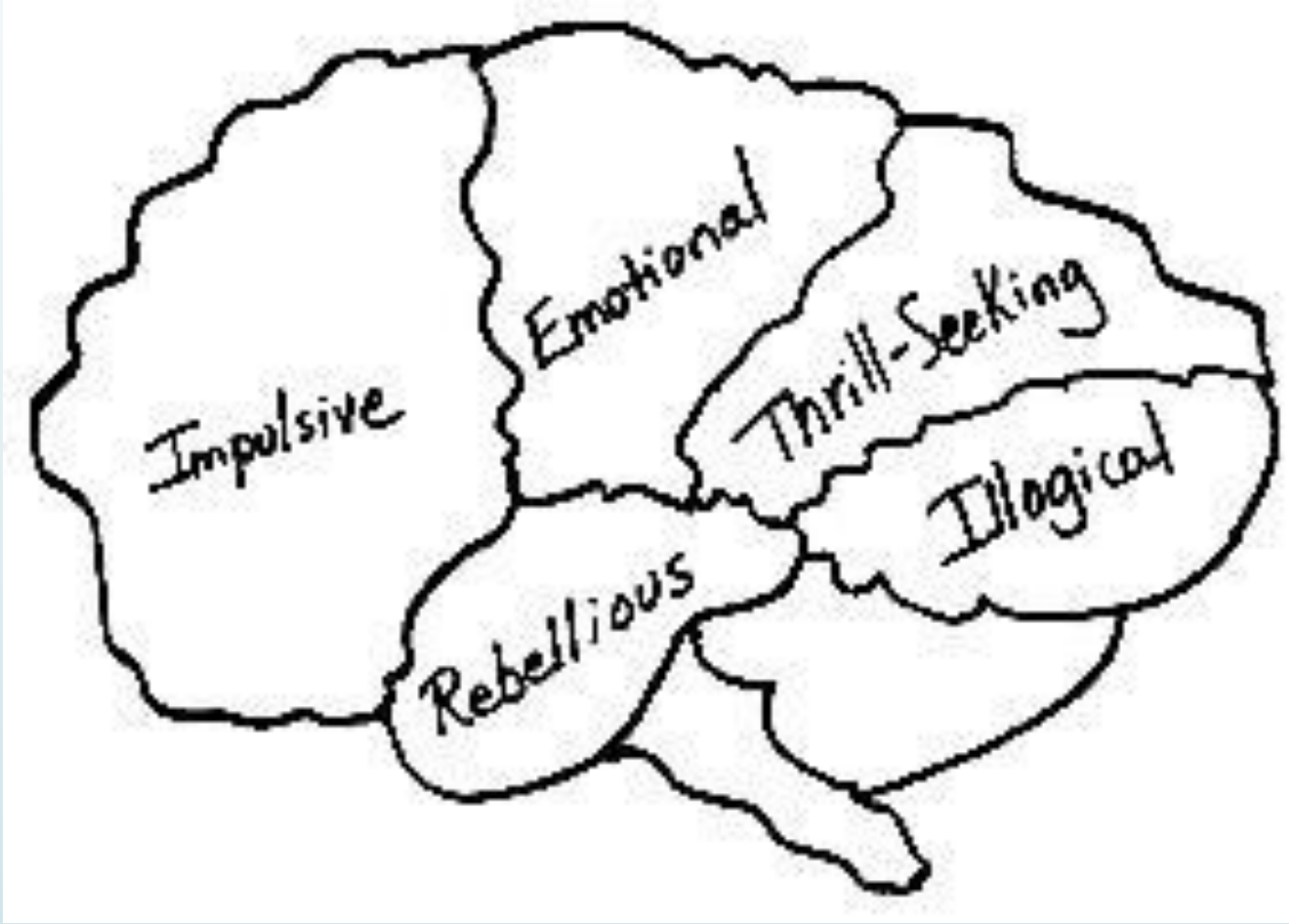
Journal (Day 1):

What is the claim this image is making about teen brains?

What is your response to this image?

What do you think about this image as a representation of teenage brains or how teens live their lives?

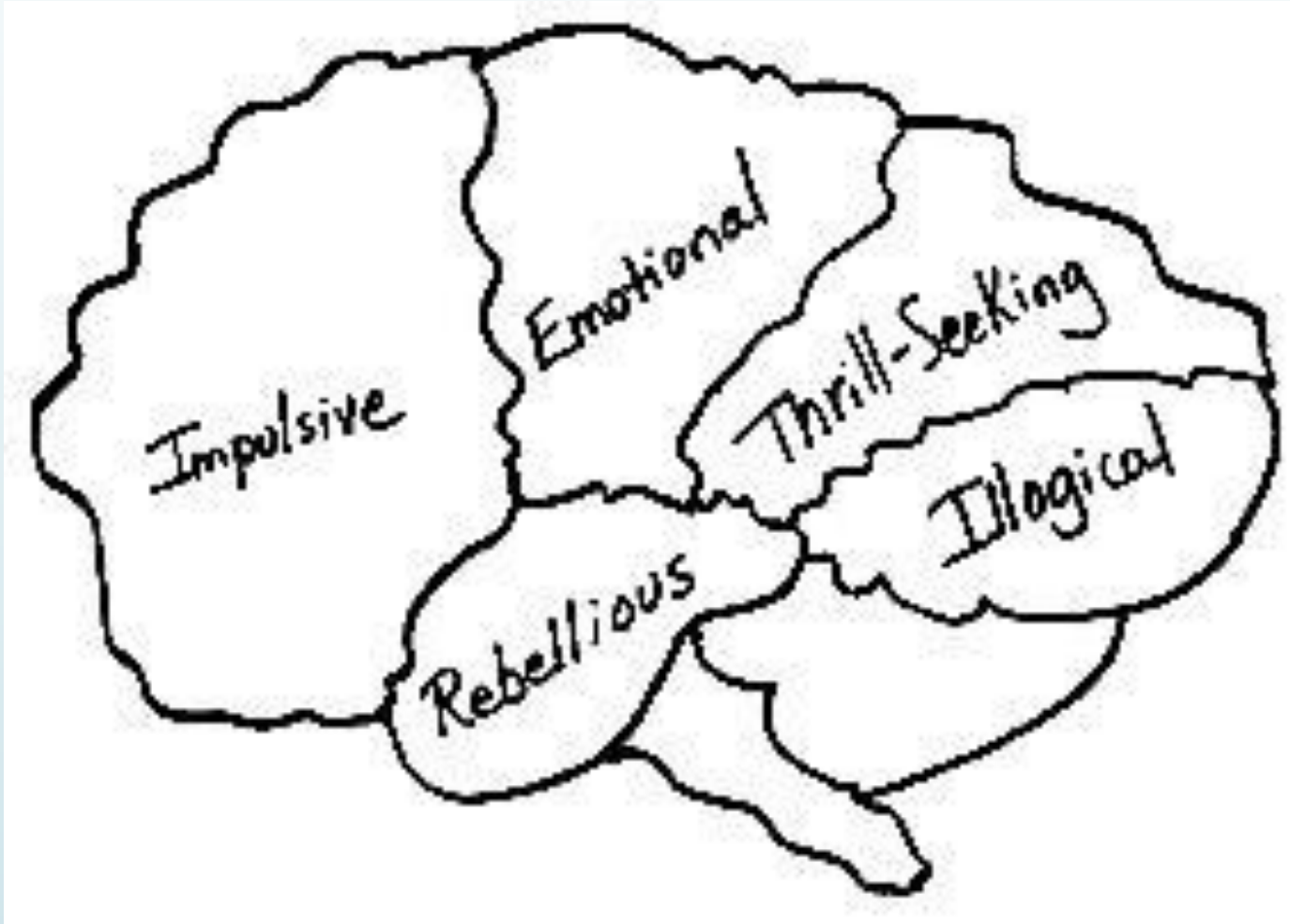
Teen Brain



Journal continued:

Add "For example, . . ." and refer to either the image or personal examples.

Teen Brain



Student Response, Grade 9

- The picture is claiming that teen brains are very impulsive and that most of the decisions and thoughts teens make are under these main categories. I believe a lot of that is true and that they eventually grow out of it. For example, when a teen gets money the first thing they do is go out and spend it. It's an impulsive decision.

It says . . .

- Teenage Brain Video

It Says	I Say

Student Response

- **It says:**
- During childhood, the brain makes billions more connections than we can use. Well used connections are strengthen, and seldom used ones die off. Teen brains work differently than adult brains. Teen brains use the amygdala. Adult brains use the frontal cortex instead. Frontal cortex is where planning, reason, and moral decisions reside.
- Experts believe that the need to push the limits that teenagers have is a necessary phase in teens development. This behavior is not exclusive to humans. It has been seen in lab mice as well. Very active parts of the brain use up a lot of oxygen. Researchers can use an MRI to detect which parts of the brain are most active. The region of the brain that is known as the Ventral Striatum is often referred to as the "reward center", and can drive is to repeat actions that provide a reward. During childhood, the brain makes billions more connections than we can use. Well used connections are strengthen, and seldom used ones die off. Teen brains work differently than adult brains. Teen brains use the amygdala. Adult brains use the frontal cortex instead. Frontal cortex is where planning, reason, and moral decisions reside.

I say:

When does a person switch from using the amygdala to the frontal cortex? This definitely explains the process of maturity, in a more scientific way. Which connections are the ones that most commonly die off? Which ones live on?

Adding to journal writing . . .

- “As _____ says, “
- “The video text explains …”
- “ According to …”
- “Supporting my example, …”
- “Just as the video …”
- “Although the video says …”
- “While the video text explains …”

Student Response

- How old is the person who drew the picture? Where did they get their information?
- **According to the picture**, most of the decisions teens make are impulsive ones. I agree with this, but I don't necessarily think that's because of their age. **Although the video says** most teens use their amygdala to make decisions while adults use the frontal cortex, I don't agree with this. What about the adults that still haven't matured and act like they are teenagers?

Journal (Day 2):

Now I'm thinking/wondering about teen brains . . .

Student Response

- The teenage brain seems to be a more complex system than adult brain. Their hormones and chemical balances go off the walls during that period of time. I mean even the tiniest thing can cause us to lose our flipping minds and freak out. **For an example** the chemical dopamine is released when something good happens to a teenager like finding money or getting a compliment these chemicals can make us feel amazing but other ones that are released can make us dreadful and down right disgusted with our self. Our bodies are affected by emotions but are controlled by chemicals that's why some things affect some people differently than others. You can't be a very emotional person if you're gonna join the military which also means your brain can't release too much of a chemical that releases sadness irrational thoughts. **And I agree with the article** but our brains aren't affected by emotions they are affected situations. The situations cause the emotions or the spikes in certain chemicals such as dopamine. But people often forget that our emotions are real but they are purely chemical and they tend to misunderstand how the brain and body usually works. So maybe if people were to understand their brains and body more maybe they can control themselves more. Granted you can't change the chemicals balances by turning a foset hose but you can THINK about a situation.

Marking the Text with Sticky Notes HD app

Quote the text!

"The Teenage Brain" by Amanda Leigh Mascarelli 2:20pm, October 17, 2012

NEW Information: Blue Notes

words, lines, phrases, sentences or sections that provide more information for understanding how a teen brain works

PERSONAL Connection: Green Notes

words, lines, phrases, sentences or sections that strike you in some way because you have something to say – it extends, challenges, supports or questions what you already think about teen brains.

Student Response:
Real Sticky HD annotations of the article

NEW INFORMATION (Blue notes)

One region deep inside the brain shows more activity in adolescents then is does in children or Adults

The prefrontal cortex is important because it teaches the rest of the brain the rules about how the world works

In axons, the insulting tissue allows information to zip back and forth between brain cells much more quickly. ☺

PERSONAL CONNECTION (Green notes)

They actually use mice for experimenting this. ☹

In their first three years of their live children develop seemingly endless connections in their brain circuitry.

Key Words and Phrases (student sample)

-adolescence is a transitional stage of physical and psychology development that begins at the onset of puberty, usually between ages 11 and 13, and ends with adulthood

-prefrontal cortex: the front portion of the brain, just behind the forehead, which controls executive functions in the brain.

Key Words and Phrases (student sample)

Pushing limits help teenagers to confront the world on their own

Mice brains work the similar to how teenager brains do

Experts believe that taking chances is a necessary phase growing up

Teen experiences can lead to powerful advantages later on in life

Teens often find themselves trapped between their impulsive tendencies and their newfound ability to make well informed and logical choices.

Teenagers are sensitive and responsive to influence by friends, desires, and emotions.

Add to writing . . . (use key words and phrases)

- "As _____ says, "
- "The video text explains …"
- " According to …"
- "Supporting my example, …"
- "Just as the video …"
- "Although the video says …"
- "While the video text explains …"
- "In addition …"
- "Corroborating …"

Student Response

"Adolescents are particularly sensitive and responsive to influence by friends, desires and emotions, researchers say." I disagree with this completely, although these are clearly all factors that influence adolescents and even adults. Every human being is born with their own brain and consciousness. Therefore every single human being, adolescent or adult alike, make their own decisions and decide on the proper actions needed to complete this decision. Responsibility is about making your own decisions and standing independently on their own two feet and accept all repercussions, good or bad, for the decisions and actions they take. People (researchers) are just always looking for an excuse as to why certain people or age groups act differently, but every single human being transgresses through the same stages of life.

What's your claim?

Make a claim about teenage brains and the connection between the brain and choices.

Student Response

According to scientist the teen brain is slower than a adult brain. That's why they say that all teen make bad decisions. **In my opinion I think that what's the scientist say dose not apply to every teen.** There is teens that know how to speak for them selfs and make good decisions and stay out of trouble. There is some teens that there attitude and decisions apply to what scientist say.

Celebration: The student has formed an opinion after reading the 3 texts.

Area for growth: Remove “In my opinion” and “I think.”

Drafting Organizer

Review your notebook entries and notes. Select the most compelling and relevant pieces of evidence and try to apply them to your claim.

Evidence	Connection	Possible Outcome or Result
The text says…	I say…	If we do this…

Using Evidence

FORWARDING: (Yes, and …)

- Illustrating
- Authorizing
- Borrowing
- Extending

Illustrating—Use as support or find examples in other texts

Original: "You must be the change you wish to see in the world." – Mahatma Gandhi

Illustrating: "Gandhi's words are true even in every day life. My mom wanted a neighborhood bike parade, and rather than waiting, she just did it. She became the change she wanted."

Try it! Use Sticky Notes collected from "The Teenage Brain" by Amanda Leigh Mascarelli 2:20pm, October 17, 2012

Authorizing—Use the expertise or status of another writer

Original: "You must be the change you wish to see in the world." – Mahatma Gandhi

Authorizing: As Gandhi, a key leader of nonviolent civil disobedience in India, explains, "You must be the change you wish to see in the world."

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Borrowing—Use the terms or ideas from other writers

Original: "You must be the change you wish to see in the world." – Mahatma Gandhi

Borrowing: So, we are left to ask, what change do we want in the world and what is the next step. Should we complain? Should we invest money in a fund? Or should we do something, take action and be the change?

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Extending—Put your own "spin" on others' ideas or examples

Original: "You must be the change you wish to see in the world." – Mahatma Gandhi

Extending: The idea of change is often thought to be about something big like world peace or social action, but what if it also means just changing our everyday lives: stop complaining, clean up the kitchen, drive the speed limit in school zones. If we changed little things in our lives would the big things also change?

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Using Evidence

COUNTERING: (Yes, but …) (On the other hand …)

- Arguing the other side

Arguing other side—Shows the usefulness of the original argument before countering

Original: "You must be the change you wish to see in the world." – Mahatma Gandhi

Countering: Although Gandhi's words seem like a good idea, in reality, changing one person cannot really change that much. I might change my behavior but that has no effect on the choices that someone makes in a far away part of the world.

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Develop Your Writing

Step 1: Develop a paragraph around your claim using sources

Step 2: Discuss the way a teen brain works

Step 3: Explore the connection between the teen brain and choices

Develop Your Writing

Using your own organizational structure, draft a mini-essay in which you develop a claim with source material.

(See chart—Argument moves)

Develop Your Writing

Stopwatch Essay

1 minute: Write about teens or brains

Develop Your Writing

Stopwatch Essay

3 minutes: Write about what you know about the way teen brains work (use the source material you already have)

Develop Your Writing

Stopwatch Essay

3 minutes: State and then write about your claim (use both the source material you have gathered and a personal example)

Develop Your Writing

Stopwatch Essay

1 minute: Write about one extension or connection this could have for you or your reader: “So, perhaps …” “Now I am wondering, …” “So, next time, …”

Revise

Use source material in writing.