Academic Reading, per 6
Hilbelink
Distance Learning Lesson
Week 7, May 18th

Name:

What teenage brains can teach us about thinking creatively

By Washington Post, adapted by Newsela staff on 05.04.20
Word Count **740**

Teens hang out near a fence. A new study says we can learn a lot from how teenage brains work. Photo: Eliott Reyna on Unsplash

Teenagers create endlessly on TikTok. They come up with dances, invent slang words, lead political movements, and draw millions of views to Minecraft and makeup videos. Tons of money is generated from these.

So why don't teenagers get more credit?

Adults have often painted teens as emotionally uncontrolled. Then advancements in neuroscience helped us to better understand teen behavior. We learned more about the brain's prefrontal cortex. It is the part that regulates planning and decision-making. It doesn't mature until around age 25.

This helped to explain adolescents' sometimes confusing behavior. However, it left adults more focused on the teen brain's role in risk-taking. They did not praise its role in learning and creating.

That has frustrated some researchers.

Academic Reading, per 6 Name:
Hilbelink
Distance Learning Lesson
Week 7, May 18th

"Emotional" And "Logical" Brain Areas Develop Differently

A lengthy report on adolescent development was released in 2019 by the National Academies of Sciences, Engineering, and Medicine. It found that some headlines that did not tell the whole story. Adults have been too obsessed with teenagers' unsteady behavior. This led to a complete misunderstanding of recent science.

The report is part of a growing effort. Nonprofit groups, scientists and policymakers are reframing how we think about adolescence. It's true that the "emotional" and "logical" parts of teens' brains develop at different speeds. But that is not necessarily a bad thing, researchers say. Focusing on the negatives overlooks the very opportunities that can help teens to learn and grow.

Adriana Galván is the director of the University of California, Los Angeles' Developmental Neuroscience Laboratory. She says that teens' fearlessness is exactly what makes them creative and leads to social change.

Teen Brain Superpowers

The teenage brain's characteristics, including risk-taking, helps to prepare them for adulthood. They gain a sort of superpower in learning and creativity. Teenage brains are at a unique neurological stage. They can quickly adjust, like in childhood, building up new connections and getting rid of unused ones. But they are also starting to gain the adult ability to think abstractly. They can imagine the future and make social connections, Galván said.

Recent research has also focused on the brain's regions that contribute to teenagers' social and emotional development. It appears that these regions do not develop on their own. They are making connections with the prefrontal cortex and other parts of the brain. It's a highly important process.

In her research, for example, Galván has examined the brain's striatum, a region associated with reward-seeking behavior. She wanted to understand its connection to the hippocampus, associated with learning and memory. Her work suggests that the connection is especially strong in teens. It appears adolescents are more likely than adults to learn from positive feedback. This could apply in education, she said.

Young people are "really good at learning from rewards," Galván said. It does drive thrill-seeking behaviors. Teachers could use that reward system to help teens learn, she said.

A Learning Experience

Joanna Lee Williams is an education professor at the University of Virginia. She contributed to the National Academies report. Some risks can be healthy, she said, like deciding to join the marching band.

That doesn't mean lifting all limits on teenage behavior. But parents and educators can start by understanding that some risks are key for learning and creating, Williams and other researchers say.

Williams acknowledges that that comes from a birds-eye view. The report's findings will not apply to every argument between adults and teenagers. Still, teens' sensitivity to rewards generally means they might think of risks in positive ways. Adults can take advantage of that. They might help teens learn from mistakes rather than leaping straight to punishing them.

"An Age Of Opportunity"

The adolescent brain does not grow alone, Galván said. It "develops in families, it develops in systems and it develops in different environments." Any of those pieces can change a teenager's growth for better or worse.

That's something youth helpers and educators have known for years. Williams said she has spoken with middle school educators with real-world concerns: What does the newer research mean for students in my school facing difficult issues? Some examples would be family problems, racism or economic inequality.

Williams sees "an age of opportunity" for adolescents. However, that "does not mean there aren't also these huge, realistic challenges as well."

She sees teens leading social movements. Throughout history, young people have injected energy and new ideas into public life, Williams said. The newer science explains why.

Academic Reading, per 6 Name:
Hilbelink
Distance Learning Lesson
Week 7, May 18th

Quiz

1 Read the following sentence from the Introduction [paragraphs 1-5].

It doesn't mature until around age 25.

Which answer choice uses the word "mature" in the SAME way as the sentence above?

(A) This program is intended for mature audiences only.

(B) Most apple trees will mature in six to 10 years.

(C) The mature thing to do would be to return the wallet.

2 Read the following selection from the section "Teen Brain Superpowers."

They can quickly adjust, like in childhood, building up new connections and getting rid of unused ones. But they are also starting to gain the adult ability to think abstractly. They can imagine the future and make social connections, Galván said.

What is the meaning of the word "abstractly" as used in the selection?

(A) in a general, non-concrete way

(B) in a complex, effective way

(C) in a specific, concrete way

3 Adriana Galván says the adolescent brain "develops in families, it develops in systems and it develops in different environments."

WHY does she say this?

(A) to illustrate that parents are primarily responsible for their children's decision-making skills

(B) to argue that parents should take an active role in helping their teenaged children make decisions

(C) to argue that home and social environments play a major role in adolescent brain development

4 What does the author want the reader to understand about adolescent brain development?

(A) Adolescent brains are powerful, and new developments in neurology can help adults to better understand, teach and learn from teens.

(B) In recent years, scientists have discovered that most common beliefs about teenage neurology are completely unfounded.

(C) Adults should stop punishing teenagers for the risks they take, and they should impose fewer limits on their behavior.

,