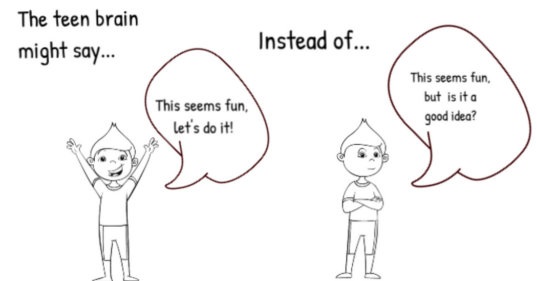


# The amazing teen brain

## Teen Brain Facts:

- The teen brain is not fully developed until about age 25.
- The brain is not growing in size but strengthening and integrating connections and "pruning" some connections; neuroscientists call this 'remodeling.'
  - [See 1 minute video about brain remodeling w/ Dan Siegel, MD.](#)
- Brain development happens from back to front: The frontal lobe (prefrontal cortex) behind the forehead is the LAST to be fully connected. It's the part of the brain in charge of things like impulse control, judgment, and emotional regulation.
- Because the prefrontal cortex is still developing, teenagers might rely on a part of the brain called the amygdala to make decisions and solve problems more than adults do. The amygdala is associated with emotions, impulses, aggression and instinctive behavior.
- The brain science helps explain why teen brains are open to incredible learning and growth & ALSO vulnerable to harm and at higher risk for developing addiction. Your teen may still be incredibly smart and competent.
- Not an excuse but an explanation: "Well, no," you have to say, "your brain is sometimes an explanation; it's never an excuse." Frances E. Jensen, MD, *The Teenage Brain*

**Some experts compare the teen brain to a fancy sports car with faulty brakes:** The parts of the brain that might urge, "slow down, be careful," are developed AFTER the part that says "faster, faster."



"...most people recognize that the early years 0-3 constitute a period when the brain is especially influenced by experience. What new research is telling us, is that adolescence looks like a second period of heightened brain plasticity. And to me what this means is that we really need to pay careful attention to the kinds of experiences that we provide young people, because the experience that they have during adolescence may have a profound effect on how their brain develops and therefore a profound effect on the rest of their life." -

Dr. Laurence Steinberg, *Age of Opportunity*

## Suggested Resources

- *The Teenage Brain: A Neuroscientist's Survival Guide to Raising Adolescents and Young Adults*, Frances Jensen, MD
- *Age of Opportunity*, Laurence Steinberg MD.
- Dan Siegel, M.D.: [Video about the Teen Brain](#) and book: *Brainstorm: The Power and Purpose of the teenage brain*
- Learn more about the teen brain: [NIMH.gov](http://NIMH.gov) / Handout: [Teen Brain: 7 Things to Know](#)