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The webinar will begin shortly.*

# **The Promise of Adolescence:** *Developmental Science & Afterschool*

September 12, 2019

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## **Experiencing Delays?**

Try closing out the other programs running on your computer.



## **Have a question or comment?**

Use the group chat to interact with presenters and other participants.

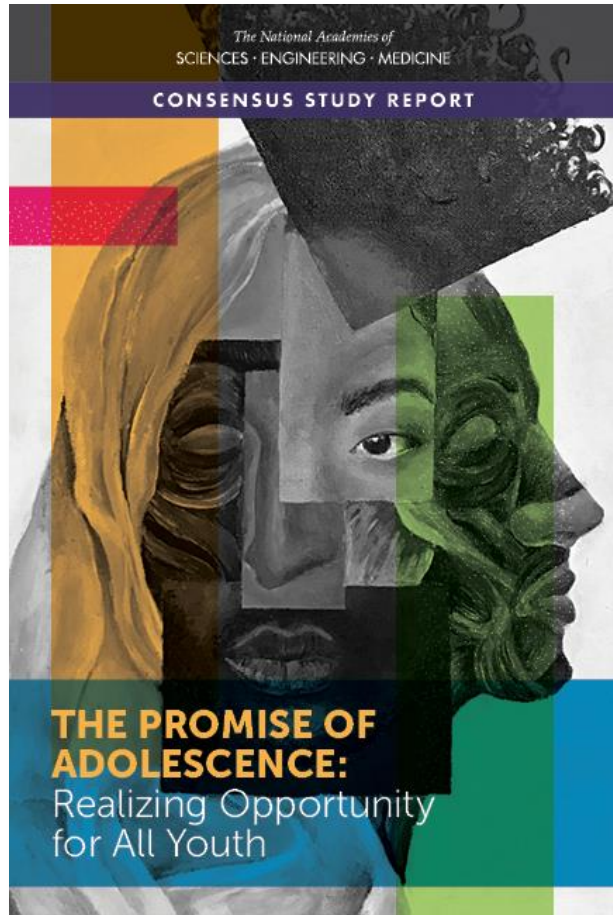
# Speakers

**Nancy E. Hill, Ph.D.**

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Harvard Graduate School of Education

**Emily Backes, JD, MA**

Program Officer  
National Academies of Science,  
Engineering, and Medicine



# Committee on the Neurobiological and Socio-behavioral Science of Adolescent Development and its Applications

Nancy E. Hill, Ph.D.

September 12, 2019

# Study Sponsors

## The Funders for Adolescent Science Translation (FAST)

- Annie E. Casey Foundation
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# Statement of Task

The study sponsors asked the National Academies of Sciences, Engineering, and Medicine to provide an evidence-based report that:

- Examines the neurobiological and socio-behavioral science of adolescent development, and
- Explores how this knowledge can be applied to institutions and systems so that adolescent well-being, resilience, and development are promoted and that systems address structural barriers and inequalities in opportunity and access.

## Why Adolescence?

- Recent advances in neurobiology and neuroimaging have demonstrated the dramatic extent of brain maturation during adolescence.
- Because of the plasticity of the Adolescent brain, it can develop and optimize in ways that are responsive to the interactions of genes, environment and culture, in ways that meet the needs of this stage of life.
- The adaptability, plasticity, and heterogeneity of adolescence creates accompanying opportunities—and obligations—for society to help all adolescents flourish.



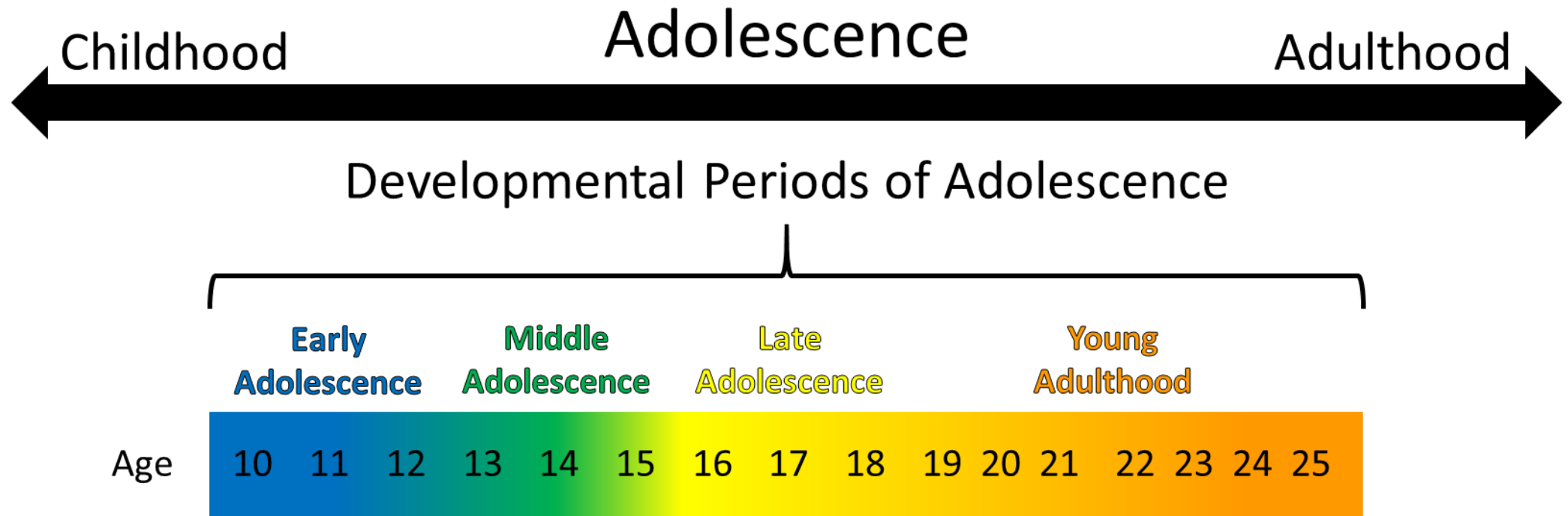
## Why Adolescence?

- Adolescence is a sensitive period of neurodevelopment that is especially affected by the environment.
- Deeply rooted, and growing, structural inequalities curtail the promise of this developmental period.

## Why Adolescence?

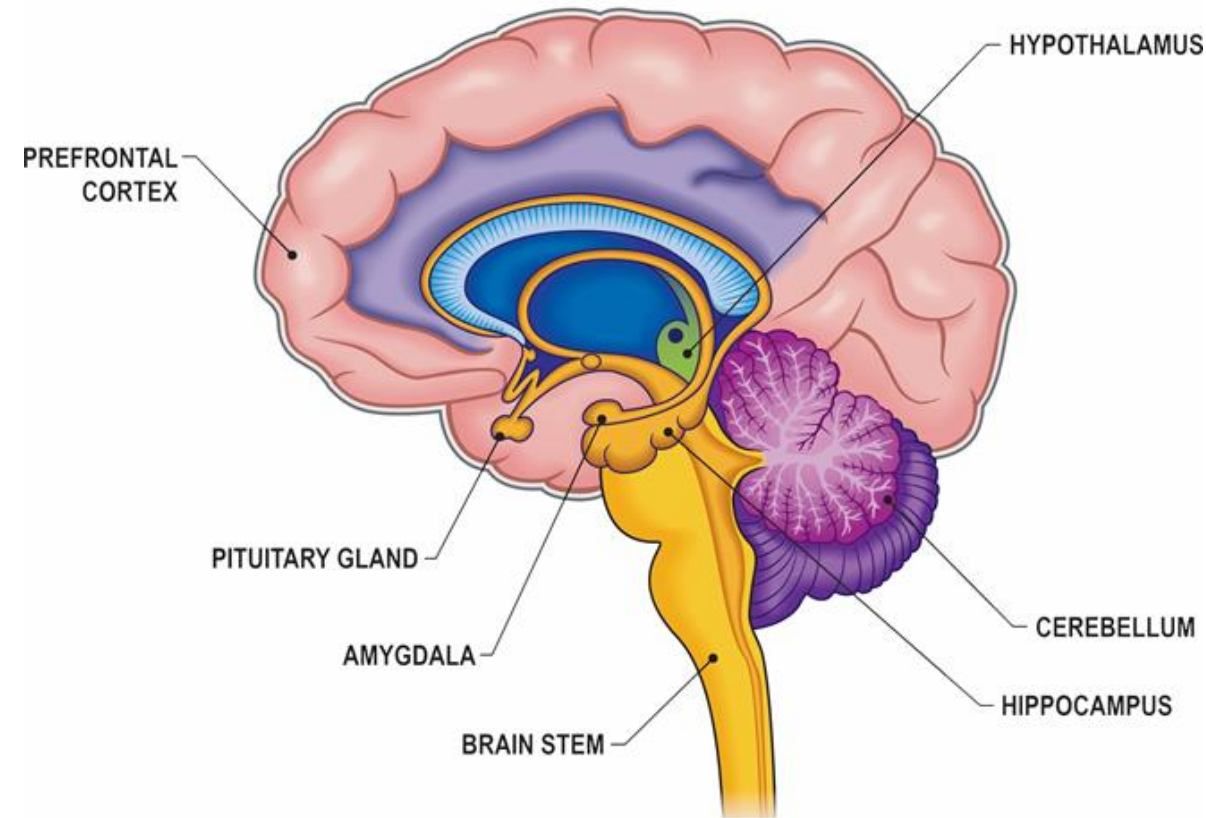
- Policies and practices that capitalize on the promise of adolescence create contexts for discovery, learning from mistakes, experimentation, and innovation.
- The challenge is to take advantage of the developmental opportunities afforded by adolescence.

# Defining Adolescence



# Adolescent Development: Insights from Neuroscience

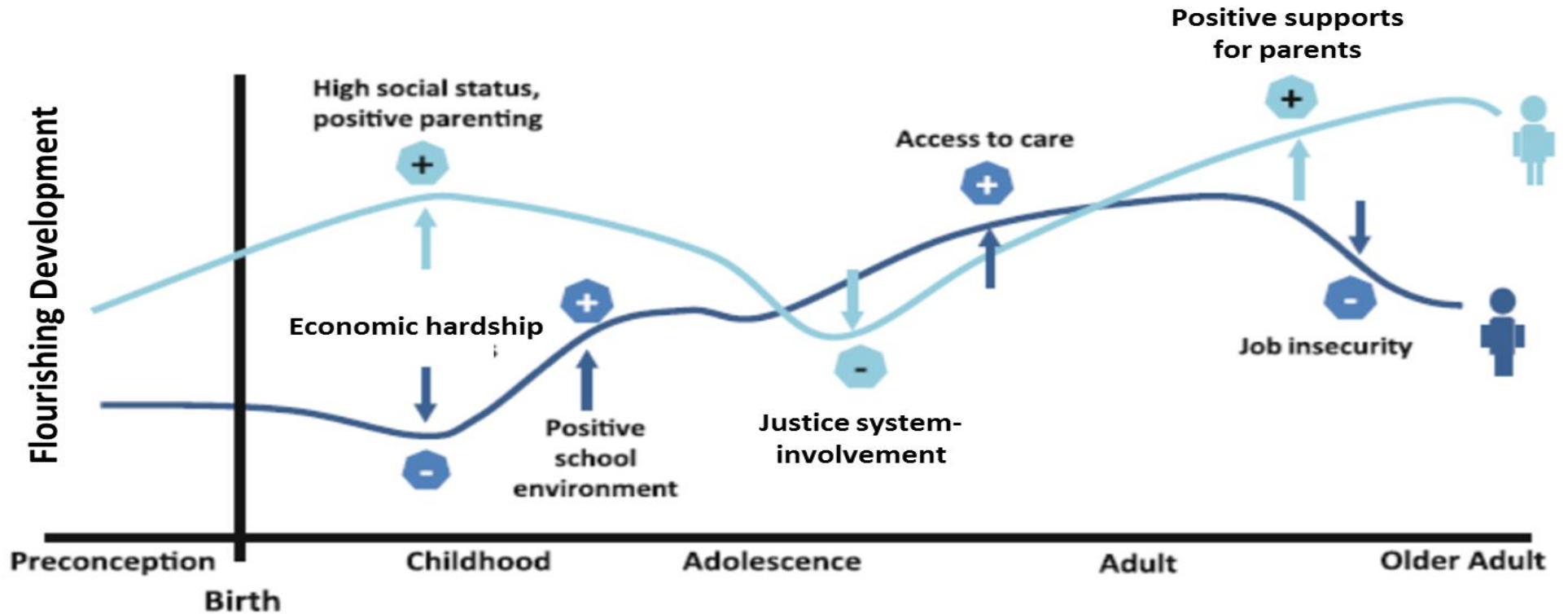
- The Adolescence reflects a unique period of heightened plasticity
  - Opportunity, but also risk
- Heightened curiosity and reward sensitivity
- Strengthening executive functions



# Interplay between Biology and Environment

- Genes and environment interact: The way heredity is expressed in behavior depends significantly on influences in a person's environment.
- The trajectory of an individual's life may be changed, negatively or positively, at each life stage.

# Interplay between Biology and Environment



Protective factors in the environment – such as supportive relationships with family and caretakers, and access to resources – support positive trajectories, while harmful experiences may lead to at-risk or poor trajectories.

# Interplay between Biology and Environment

- Adolescents' **heightened sensitivity and responsiveness to environmental** influences implies creativity, adaptability, risk, and resilience.
- Adolescence provides an **opportunity for recovery**. Because of the malleability and plasticity of the adolescent brain, redirection, recovery, and resilience are possible.
- Investments in programs and interventions that capitalize on brain plasticity during adolescence can promote beneficial changes in developmental trajectories for youth who may have faced adverse experiences earlier in life.

# Inequity and Adolescence

- Sources of Inequity in Adolescence:
  - Disparities in family and neighborhood resources and supports
  - Biased and discriminatory interactions with important social systems
  - Resulting inequalities in opportunity and access
- The result: Reduced access to opportunities and supports enjoyed by more privileged youth and exposure of less privileged youth to excess risks, stresses, and demands.



# Inequity and Adolescence

- These excess pressures “get under the skin” and adversely affect the brain and body during this critical developmental period.
- But, these inequities are not immutable. Policies & programs can address disparities at the source.

# Adolescent Development

- Adolescents are **active participants** in their own development.
- Increased cognitive abilities provide the capacity for psychosocial development, such as developing identity and capacity for self-direction.

# Adolescent Development

- An **adolescent's identity** is an emerging reflection of one's values, beliefs, and aspirations, and it can be constructed and reconstructed over time and experience.
- Young people become increasingly **aware of and attuned to their social status** during adolescence, and institutions, policies, and practices may reinforce status hierarchies and stereotypes about members of groups that are nondominant or stigmatized in society.
- Adolescence is marked by a **growing capacity for self-direction**. Over the course of adolescence, youth gain the cognitive skills needed to reflect on complex questions about their role in the world.

## Guiding Principles of Adolescent Development for Policy and Practice

- Adolescence is a **sensitive period** for discovery and learning, providing opportunities for life-long impact.
- Learning how to **make decisions** and to **take responsibility** for shaping one's own life are key developmental tasks of adolescence.

## Guiding Principles of Adolescent Development for Policy and Practice

- **Forming personal identity** is another central task of adolescence. The increasing diversity of U.S. adolescents and the nation as a whole requires youth-serving systems to be culturally sensitive and to be attuned to the integrated needs of each adolescent.
- **Supportive familial, caregiver, and adult relationships** play a significant role in fostering positive outcomes for adolescents.

## Guiding Principles of Adolescent Development for Policy and Practice

- Adolescence provides the **opportunity for ameliorating harmful effects** of childhood exposures.
- **Disparities** in family and neighborhood resources and supports, biased and discriminatory interactions with important social systems, and resulting inequalities in opportunity and access severely curtail the promise of adolescence for many youth.

Pause for Questions

# Changing Developmental Trajectories



Scientific research suggests that adolescents have the capacity to overcome negative early experiences.

Interventions can redirect and remediate maladaptation in brain structure and have also shown promise in promoting emotional well-being through programs such as mindfulness and empathy-sensitizing work.



# Decision-Making



# Practical Knowledge



# Adaptability





# Psychosocial Skills



# The Importance of Sleep



## Key Recommendations

Recommendation 6-1: Rectify disparities in resources for least-advantaged schools and students.

Recommendation 6-2: Design purposeful but flexible pathways through education.

Recommendation 6-3: Teach practical knowledge and nonacademic skills, such as decision-making, adaptability, and psychosocial skills.

# Key Recommendations

Recommendation 6-4: Protect the overall health and well-being of each student.

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Recommendation 6-5: Foster culturally sensitive learning environments.

Recommendation 6-6: Help adolescents and families navigate the education sector.

## Conclusions

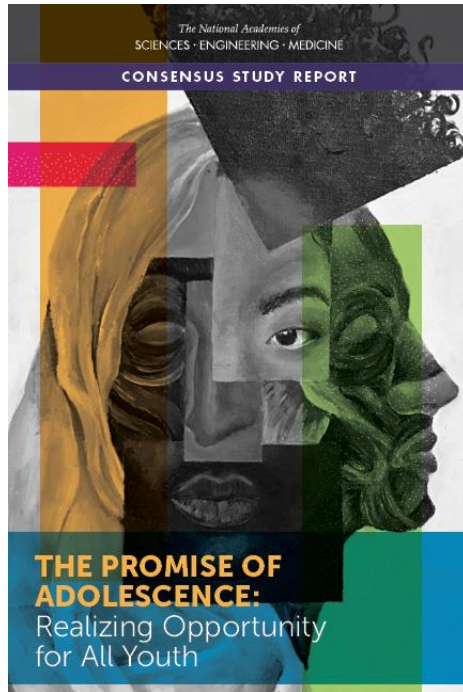
Society has a collective responsibility to build systems that support and promote positive adolescent development.

These systems should reflect a rich understanding of the developmental needs of adolescents and a specific recognition of adolescence as a time of great opportunity to promote learning and discovery and to remediate past developmental challenges.

Until society embraces this responsibility, the promise of adolescence will remain unfulfilled for millions of youth.



# Thank you!



To read or download a copy  
of the report, please visit:

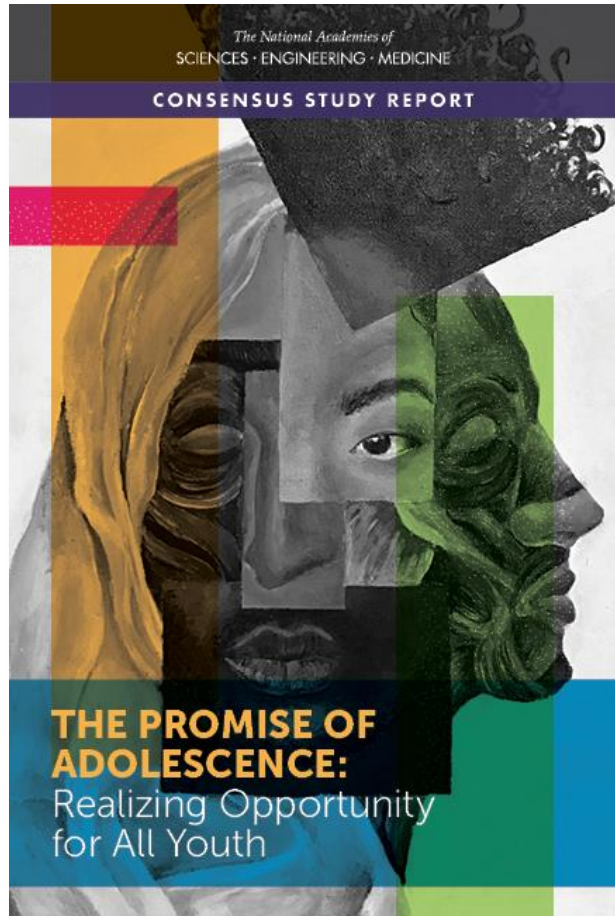
[www.nationalacademies.org/  
adolescentdevelopment](http://www.nationalacademies.org/adolescentdevelopment)

For more information about the study or dissemination activities, please contact:

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# The Promise of Adolescence: Realizing Opportunity for All Youth

## Resources

# Report Highlights

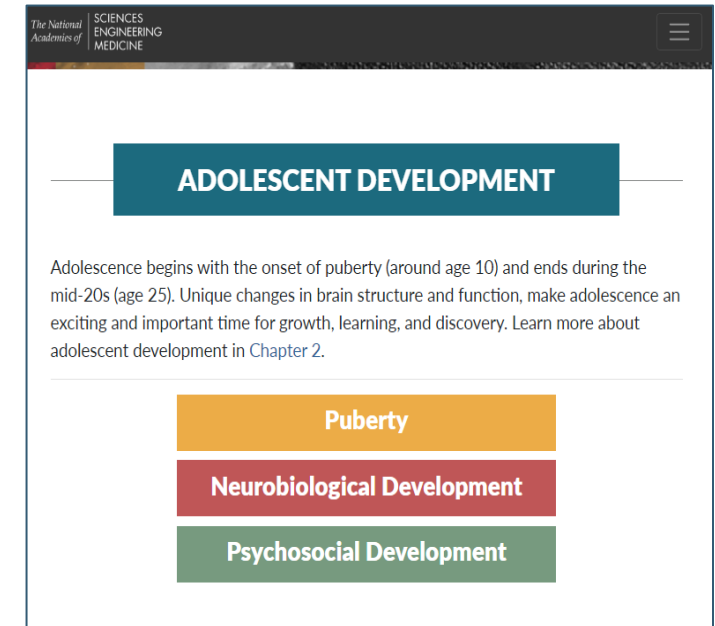
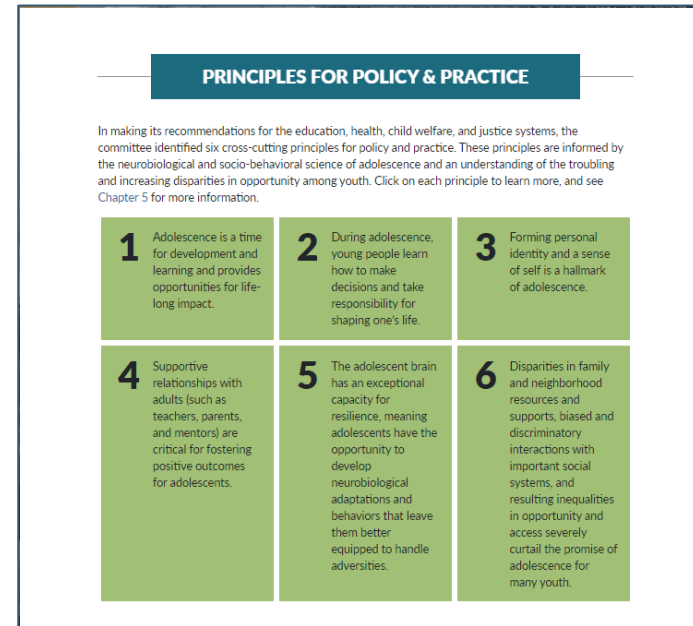
4-page summary of the entire report:

- The Adolescent Brain
- Interplay between Biology and Environment
- Inequity in Adolescence
- Recommendations for Action in
  - Education
  - Health
  - Child Welfare
  - Justice



# Resources Hub

Interactive webpage with streamlined information from the report and links to additional resources.





# Targeted Sector Briefs

4-page summaries of report information pertinent to specific sectors.

- What is Adolescence?
- Creating Adolescent-Friendly Systems
- Recommendations for Action in
  - Health
  - Education
  - And more forthcoming!



# Social Media Toolkit

Sample language, social media posts, and graphics, free for use

- Report Overview (for use in newsletters, blog posts, etc.)
- Twitter and Facebook Posts
- Graphics – for Twitter, Facebook, and Instagram



**Supportive relationships with adults are critical for adolescents.** These supportive relationships are as important for adolescents as they are for young children.

#PromiseofYouth

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**Adolescence is a period of great opportunity** to promote learning and discovery and to address the harmful effects of past negative experiences.

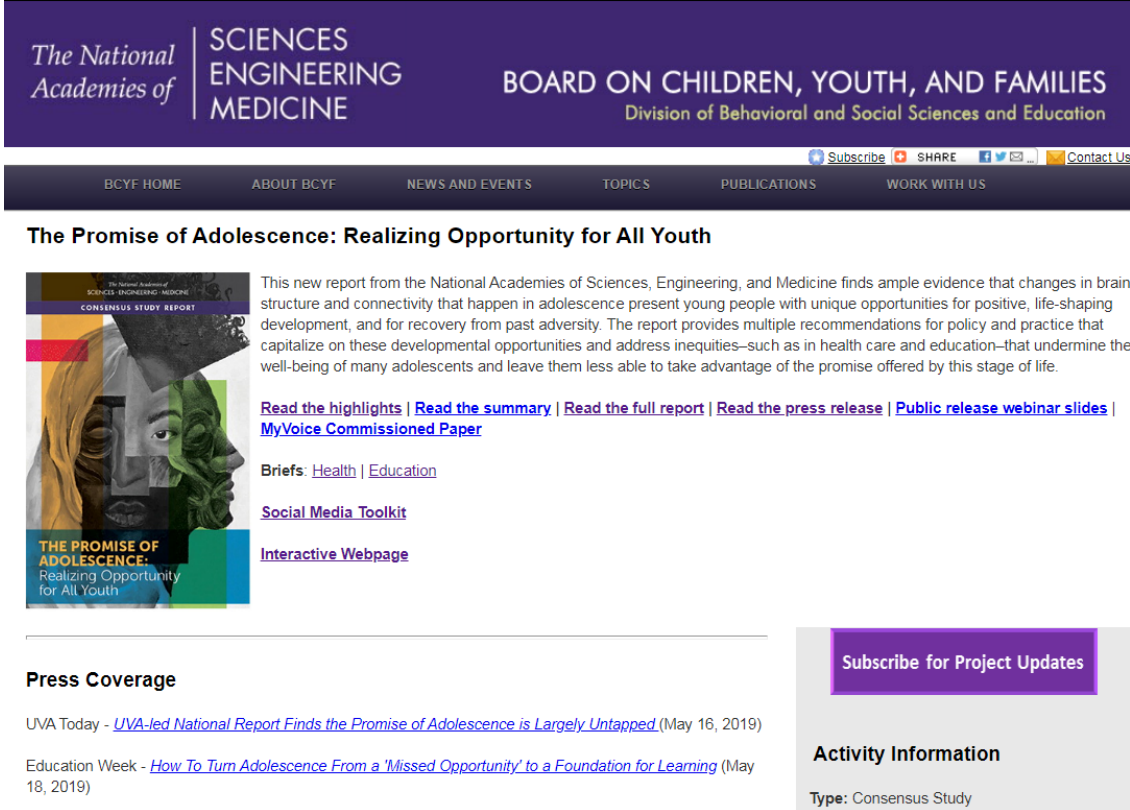
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# Project Webpage

- Find all of the resources listed here, plus upcoming events, additional project information, and more!
- New resources added regularly – check back soon!

[NationalAcademies.org/  
AdolescentDevelopment](https://www.nationalacademies.org/AdolescentDevelopment)



The screenshot shows the website of The National Academies of Sciences, Engineering, and Medicine, specifically the Board on Children, Youth, and Families, Division of Behavioral and Social Sciences and Education. The page features a purple header with the organization's name and a navigation bar with links like 'BCYF HOME', 'ABOUT BCYF', 'NEWS AND EVENTS', 'TOPICS', 'PUBLICATIONS', and 'WORK WITH US'. The main content area is titled 'The Promise of Adolescence: Realizing Opportunity for All Youth' and includes a summary of a new report, a list of links to read highlights, summary, full report, press release, and webinar slides, as well as a link to a MyVoice Commissioned Paper. Below this, there are links for 'Briefs: Health | Education', 'Social Media Toolkit', and 'Interactive Webpage'. A 'Press Coverage' section lists two articles from UVA Today and Education Week. On the right side, there is a purple button to 'Subscribe for Project Updates' and a section for 'Activity Information' which identifies the report as a 'Consensus Study'.

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### The Promise of Adolescence: Realizing Opportunity for All Youth

This new report from the National Academies of Sciences, Engineering, and Medicine finds ample evidence that changes in brain structure and connectivity that happen in adolescence present young people with unique opportunities for positive, life-shaping development, and for recovery from past adversity. The report provides multiple recommendations for policy and practice that capitalize on these developmental opportunities and address inequities—such as in health care and education—that undermine the well-being of many adolescents and leave them less able to take advantage of the promise offered by this stage of life.

[Read the highlights](#) | [Read the summary](#) | [Read the full report](#) | [Read the press release](#) | [Public release webinar slides](#) | [MyVoice Commissioned Paper](#)

Briefs: [Health](#) | [Education](#)

[Social Media Toolkit](#)

[Interactive Webpage](#)

#### Press Coverage

UVA Today - [UVA-led National Report Finds the Promise of Adolescence is Largely Untapped](#) (May 16, 2019)

Education Week - [How To Turn Adolescence From a 'Missed Opportunity' to a Foundation for Learning](#) (May 18, 2019)

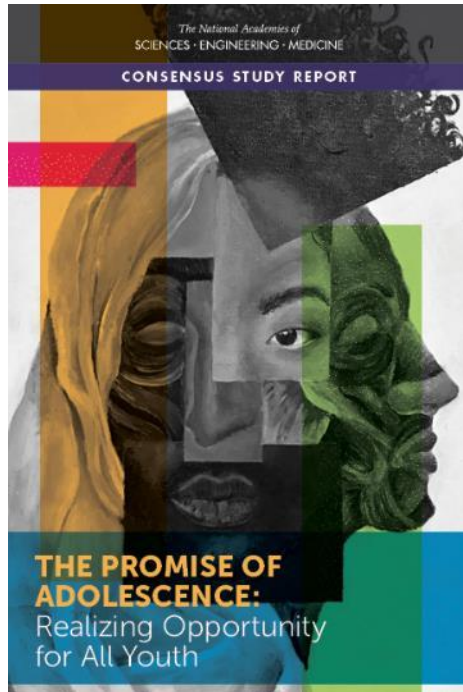
**Subscribe for Project Updates**

**Activity Information**

Type: Consensus Study



# Thank you!



To read or download a copy  
of the report, please visit:

[www.nationalacademies.org/  
adolescentdevelopment](http://www.nationalacademies.org/adolescentdevelopment)

For more information about the study or dissemination activities, please contact:

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Q&A