



THE PROMISE OF ADOLESCENCE:

Realizing Opportunity for All Youth

OPPORTUNITIES FOR THE EDUCATION SECTOR

Adolescents—young people ages 10 to 25—make up nearly one-fourth of the U.S. population. Drawing upon recent scientific advances, *The Promise of Adolescence Realizing Opportunity for All Youth* (2019), a report from the National Academies of Sciences, Engineering, and Medicine, highlights the need for policies and practices that better leverage the developmental opportunities offered by adolescence. The changes in brain structure and function that happen at this age present adolescents with unique opportunities for positive, life-shaping development, and for addressing the harmful effects of negative early life experiences, such as trauma, abuse, or economic hardship.

The report examines how the nation's education system can better support adolescents, and these findings and recommendations are highlighted in this brief.

WHAT IS ADOLESCENCE?

Adolescence is a developmental period rich with opportunity for youth to learn and grow. Throughout adolescence, the connections between brain regions become stronger and more efficient. This means that adolescents' brains can adapt, and they become more specialized in response to demands placed on them by their environments—by learning opportunities at school, for example, and by social interactions with their peers and families.

The adolescent brain also has an exceptional capacity for resilience, meaning adolescents can develop neurobiological adaptations and behaviors that leave them better equipped to handle adversities. By intervening during adolescence, we can improve young people's overall well-being and help them lead meaningful, healthy, and successful lives.

CREATING THE EDUCATION SECTOR OF THE FUTURE

Our understanding of adolescence, together with major changes in the labor market and technological development, require rethinking and modernizing the education system.

Variability in academic ability generally increases across during adolescence, therefore, the secondary school system of the future must meet teens “where they are” and offer differentiated and responsive academic opportunities, including individualized instruction, tutoring, and credentialing. Promising strategies include:

- creating and using new technologies to tailor instruction to meet individual needs;
- identifying students who may be struggling academically and helping them to acquire the appropriate grade-level skills and knowledge needed to succeed;
- training teachers to differentiate instruction;
- increasing the availability of tutoring;
- and providing opportunities for students to explore various interests and abilities.

Growing recognition of the importance of non-academic skills for success in modern life requires schools to broaden their mission to incorporate the teaching of skills such as decision-making, practical knowledge (e.g., budgeting and securing housing), and adaptability. As adolescents age, neurological changes allow them to become faster and more flexible in cognitive activities such as thinking, decision-making and connecting abstract ideas. By practicing these skills, adolescents can improve their ability to make sound decisions that can benefit their personal and professional lives as they mature and enter adulthood. Psychosocial tasks, like identity and capacity for self-direction, are essential for the transition into adult roles. Likewise, adolescents need opportunities to develop critical thinking, creativity, and reasoning skills, which have become increasingly valuable in the workforce.

By providing learning environments that encourage exploration and creativity, students have a chance to learn from mistakes and discover their individual identities and how those identities fit within society. Allowing students

to engage in divergent thinking, such as finding innovative uses for everyday objects, can enhance overall brain development.

The growing diversity of U.S. adolescents—the majority of youth will belong to a demographic category other than White by 2020—also requires schools to recognize adolescents’ social and health needs, become more culturally sensitive, and address biases that result in the disproportionate exclusion of students from historically marginalized groups. When adolescents are exposed to diverse populations and role models with whom they can identify, it helps them develop confidence to shape their own lives.

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The education system can also support the physical and mental health needs of youth by providing opportunities for students to become active and develop healthy eating habits, creating supportive and safe school environments, providing mental health services, and adopting trauma-informed care and services.

Moreover, recognizing the importance of caregivers in adolescents’ lives, the education system will need to provide additional supports for adolescents and their families to assist them in navigating an increasingly complex educational system.

RECOMMENDATIONS FOR THE EDUCATION SYSTEM

The report outlines recommendations for modernizing the nation's education system (See Chapter 6). Taken together, these recommendations constitute a blueprint for achieving a developmentally appropriate education sector that reflects the preparation, knowledge, and skills that youth need for the 21st century and that rectifies longstanding and persistent disparities in resources across demographic backgrounds.

Recommendation 6–1: Rectify Disparities in Resources for Least-Advantaged Schools and Students

- A. All states should take steps to eliminate resource disparities across districts and schools by exploring methods or formulas for financing education to augment or replace municipal tax bases.
- B. In coordination with states and localities, the federal government should develop "NextStep," a program targeting underprivileged adolescents to promote both their academic and non-academic development.

Recommendation 6–2: Design Purposeful but Flexible Pathways through Education

- A. Recognizing the enormous heterogeneity in the academic levels and needs of adolescents, school districts should be funded to improve their capacity to adapt to individual students' needs, including pace of learning and need to make up work.
- B. School districts should facilitate diverse pathways and postsecondary plans for adolescents, including for those students interested in career-oriented or vocational education and training as well as those who are college-bound, and ensure that students have the skills and access to coursework necessary for the option to switch between the two as their interests may evolve.
- C. School districts should design flexible schedules for course offerings during the academic year and the summer to enable youth to easily make up classes, recover lost credits, and advance in their course work, especially for youth who are over-age and under-credited. In addition, school personnel should help youth and families create specific plans to recover lost credits, to advance in their course work, and to pursue postsecondary job and career opportunities.

- D. Schools should provide flexible and diverse opportunities for students to develop interests, talents, and dispositions to foster their general wellbeing and facilitate their civic engagement.
- E. States and localities should provide funding to allow schools to hire sufficient career, vocational, and college counselors who are knowledgeable about the local job markets in order to prepare youth for 21st century jobs and identify internships and apprenticeships to facilitate the training youth need to transition to the job market.
- F. Local businesses and school districts should create robust relationships and specific programmatic linkages to ensure that school curricula enable youth to learn the skills and information needed to prepare them for meaningful jobs and careers in the local economy.
- G. Local businesses, local colleges, and school districts should create specific internships and apprenticeship training programs to prepare youth for, and provide credentials for, meaningful jobs and careers.

Recommendation 6–3: Teach Practical Knowledge and Non-Academic Skills, Such as Decision-Making, Adaptability, and Socio-emotional Competence

- A. Schools should create significant opportunities for youth to develop non-academic skills, including project-based learning, socio-emotional learning, and practices encouraging reflection on intellectual growth and personal identity.
- B. Schools should teach adolescents specifically about brain development so that they understand its connections to their own health and well-being.
- C. Schools should provide opportunities to youth both within classrooms and within the larger school context to regularly make impactful decisions in order to develop both decision-making skills and efficacy for civic engagement.
- D. The U.S. Department of Education should create guidelines for, and school districts should create, curricula to ensure mastery of practical life skills for youth upon graduation, either through specific courses or integration into existing courses. Practical knowledge includes finance management, budgeting and banking; obtaining and managing insurance (e.g., health, auto); housing (renting, leasing, mortgages, contracts); and transportation (e.g., drivers licenses, identification and processes for using public transportation such as trains, buses, and air travel).

- E. To foster civic engagement and decision-making and to empower youth to effect change in their communities, school districts and local governments should provide youth with opportunities to participate in research designed to improve the agencies that are directed to serve them (e.g., by designing and identifying appropriate research questions, analyzing appropriate data, and drawing recommendations and conclusions).
- B. Schools should recruit and retain a diverse workforce to mirror the diversity of their student bodies.
- C. College and university schools of education and other teacher training programs should require coursework that assures mastery of adolescent development and culturally inclusive pedagogy and implicit bias in their training of teachers.
- D. School districts and schools should implement curricula that are culturally inclusive and affirm the value of the diverse ethnic and cultural backgrounds represented among students, both in content and learning styles.

Recommendation 6–4: Protect the Overall Health and Well-being of Each Student

- A. Given the importance of sleep for adolescents, researchers and policy makers should prioritize identifying ways to mitigate the potential challenges of later school start-times and fully consider the benefits of sleep for adolescents. School staff should consider the value of sleep as they plan the school day and design homework and assignments.
- B. School districts should enact policies and practices that promote supportive school climates and ensure safety for all students.
- C. States and localities should provide funding for, and direct schools to provide, increased access to mental health services for students.
- D. School districts, in coordination with their local communities, should ensure that adolescents have the time and opportunity to engage in sufficient health-promoting physical activity each day and that healthy food options are available.

Recommendation 6–5: Foster Culturally Sensitive Learning Environments

- A. State and federal agencies, school districts, and schools should require that teachers, counselors, administrators, and staff engage in regular training on implicit bias and cultural sensitivity, generally and as they relate to specific populations within the school.

- E. Schools and school districts should create curricular opportunities for culturally relevant content and exposure to perspectives of non-dominant groups.
- F. Schools and districts should establish and utilize disciplinary policies and practices that are developmentally appropriate and ensure that disciplinary measures are applied equitably and fairly. School leaders should assess and monitor their disciplinary practices to assure that they are free of biases by race, gender, socioeconomic status, or ability status.
- G. School districts and schools should implement equity-driven principles of conflict intervention.

Recommendation 6–6: Help Adolescents and Families Navigate the Education Sector

- A. Schools should support adolescents and families by serving as a coordinator of institutional services, such as providing assistance in identifying internships, apprenticeships, mentoring, and training for career and vocational transitions, along with navigating the college admissions process.
- B. School districts should assist families in navigating the education sector to identify opportunities and resources to meet the specific educational needs of their adolescents.

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