Middle School-Age Learning Predicts Career Success

CREA
LEARNING
ACADEMY
FUELING MINDS, POWERING LIVES

Copyright notice

CREA Learning Academy, LLC.

P.O. Box 1112, Chatham, NJ 07928, USA.

Middle school age

Middle school (also known as intermediate school, or junior high school) is the educational stage encompassing grades 6 – 8 in most cases, as the transition from primary to high school. This includes children from pre-teen to early teenage – usually in the range of 10 to 14 years.

This is also perhaps the age where children go through the most prolific developmental milestones, along with the most significant changes in their external environment.[1] As puberty begins, children go through some big physical changes including periods of rapid growth, although girls tend to develop sooner than boys. Kids at this age commonly become a little clumsier as their height and weight change quickly. They also start showing uneven development in skills like agility, balance, strength and flexibility; need more breaks and rest since much energy is being used for growing; and may mature more physically than cognitively or emotionally.

Problem-solving and thinking skills develop a lot at this age. Children in their middle-school age start to understand concepts like power and influence, and question things instead of taking everything at face value. This is also when they begin developing a worldview, including a basic set of values – and the initial desires for societal contribution and personal wealth are generated.

Such cognitive evolution in middle school age also manifests in the kids' use of metaphors, slang and different ways of speaking, and their sudden interest in having discussions, debates and arguments. They also often pay more attention to body language, tone of voice and other non-verbal language cues. The desire to 'fit-in' perhaps is never greater as children in this age group tend to bow to peer pressure, have experiences with bullying, and are aware of their own accomplishments and weaknesses. This is also the age when they start keeping secret – even if for the sake of the feeling of being able to do so!

Middle school age is quite unique, and is perhaps the singular most important period that forms the building blocks of a person's growth and development – in career and in life.

> *"Middle school is kind of like Middle-earth. It's a magical journey filled with elves, dwarves, hobbits, queens, kings, and a few corrupt wizards. Word to the wise: pick your traveling companions well. Ones with the courage and moral fiber to persevere. Ones who wield their lip gloss like magic wands when confronted with danger. This way, when you pass through the congested hallways rife with pernicious diversion, you achieve your desired destination—or at least your next class."*
>
> *- Kimberly Dana*

Importance of Middle School Age

The importance of middle childhood, as a developmental period, was not always recognized by scholars. The grand theorists Freud and Piaget saw middle childhood as a plateau in development, a time when children consolidated the gains they made during the rapid growth of the preschool period, and when they prepared for the dramatic changes of adolescence.[2] Erik Erikson, the proponent of the "eight stages of man", stressed the importance of middle childhood as a time when children move from home into wider social contexts that strongly influence their development.[3] He viewed the middle childhood years as the time when children should develop what he called "sense of industry" and learn to cooperate with their peers and adults. The involvement in formal schooling and organized activities that begins during these years, introduces children to new social roles in which they earn social status by their competence and performance.[4]

Children who do not master the skills required in these new settings are likely to develop what Erikson called a "sense of inferiority," which can lead, in turn, to long lasting intellectual, emotional, and interpersonal consequences.[2]

Researchers have corroborated Erikson's notion that feelings of competence and personal esteem are of central importance for a child's well-being.[5,6] For instance, children who do not see themselves as competent in academic, social, or other domains (such as athletics, music, drama, or scouting) during their elementary school years report depression and social isolation more often than their peers,[7] as well as anger and aggression.[8]

Successful experiences in a wide range of settings and interests can help to give a child in middle school age a healthy, positive view of his or her competence, and a positive attitude toward learning and engagement in life's activities and challenges.

Middle School Age Learning and Success in Adulthood

*"For in every adult there dwells the child that was,
and in every child there lies the adult that will be."*

- John Connolly

Many aspects of adolescence influence success in personal and professional lives. These are intertwined with the various changes and milestones that are characteristic to the growing individual through middle school.

Self-assessed competence in sixth grade has also been found to predict self-worth and competence in social skills, relationships, jobs, intellect, and athletic abilities as adults.[9] In addition, based on longitudinal data collected across three developmental stages: early adolescence, young adulthood, and middle adulthood, researchers have shown that failure at school during early adolescence influenced status attainment during middle adulthood.[10]

The impact of middle childhood education on adult life success also does seem to be universally critical, irrespective of country or educational system. A study of five data sets from four different countries established the importance of adolescent skills and behaviors on future educational and occupational success in adulthood measured through a variety of achievement and behavioral skills. The results revealed that adolescent achievement, especially in math, was a strong indicator of educational success, and adolescent achievement was a better predictor of adult earnings compared to non-cognitive measures.[11] Another longitudinal study that followed two groups of students in New York State, and Finland through their adolescence, early adulthood, and middle adulthood, found that across both countries and genders, children's cognitive or academic functioning and their parents' occupation at 8 years of age had independent and positive effects on the children's future adult occupational attainment.[12] In another study of the connection between middle and high school education and adult outcomes in first and second generation American immigrants measured by standardized test scores and GPA during middle, found that the academic achievement of immigrant students during early adolescence was an accurate indicator of outcomes later in life.[13]

Task persistence in adolescence has been found to have significant influence on future success in education and occupational attainment.[14] Task persistence at 13 years of age was also found to be a significant indicator of income and occupational level in middle adulthood for men, and it was also connected to adult educational attainment. In a study in New Zealand examining the associations between measures of attentional difficulties at eight years of age and psychosocial outcomes at age 18 in children, the researchers found that attentional difficulties during middle childhood were associated with academic difficulties and failure, juvenile offences, and substance abuse behaviors during young adulthood.[15]
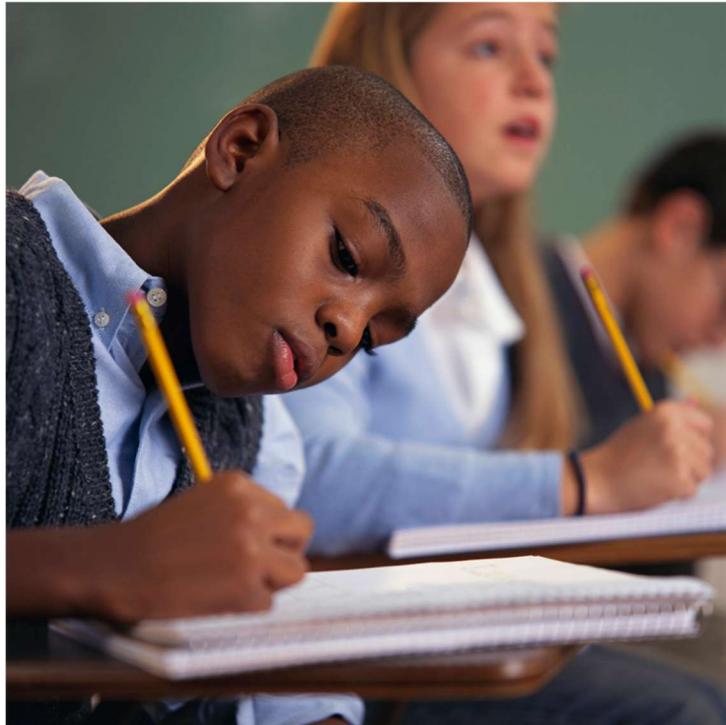
An all-round exposure and participation in extracurricular activities influenced are also found to influence long-term educational success. Participants in two cohorts of middle school students who were followed until age 20, demonstrated that consistent extracurricular participation during early and middle adolescence was positively associated with interpersonal competence during middle adolescence, educational aspirations during late adolescence, and educational status at age 20.[16]

Spengler et al. examined how characteristics and behaviors measured at age 12 related to occupational success at age 52. The researchers measured parental SES, intelligence, and student characteristics such as inattentiveness, school entitlement, responsible student, sense of inferiority, impatience, pessimism, rule breaking, defiance of authority, and studiousness at age 12. Occupational success and income was then measured in the participants at age 52. The results showed that student characteristics had both direct and indirect effects on future career success after differences for parental SES and IQ were adjusted for.[17]

Middle School Age and Leadership

In the knowledge economy leadership skills demonstrated in thought and in action is going to determine, in large parts, which of today's kids would go on to become titans of industry and premiers of nations. Interestingly, however, the topic of leadership and adolescence had not gained popularity as a research area of study until the late 20th century. Researchers indicate that in the past, adults in the United States did not think of adolescents as leaders, hence, developing their leadership skills was not a priority.[18] Family was traditionally the arena in which leadership skills were first introduced and taught to adolescents and youth, often in the form of learned responsibilities such as cleaning their rooms, setting the table, or taking out the trash. [19]

With growing global competition and new challenges that face the composite human society, there is ample recognition of the criticality of developing adolescent leadership to ensure efforts to transform our middle school age kids into productive and skilled adults. However, the methods of such transformation are far from uniformly agreed upon. Some researchers suggest the need for classroom instruction in varied skills to self-regulate, set goals, learn to time-manage, stay organized, and develop good study habits.[20] Mastering these skills are expected to alleviate the pressure of middle school social dynamics, and develop leadership skills that would be able to produce future generations of leaders and

higher education scholars. The general idea offered was to prepare middle school students with a foundation of knowledge and skills that would build their confidence and self-esteem needed to accept leadership roles in the adult workforce.[21]

Some researchers believe it is school principals' responsibility to foster leadership development in their schools,[22,23]while others believe that the school environment must support a culture for developing leaders.[24]

There, however, is a body of literature that suggests that leadership development in middle schools is quite an obvious possibility. Middle school age involves a period of emotional, behavioral, and social growth for adolescents as they transition from childhood to early adulthood, that increase their ability to comprehend complex situations.[25] This time in life, in turn, prompts adolescents' desire to become independent individuals. As cognitive skills develop in adolescents, they are eager to learn in their environment and to find their own identity that is distinct from their parents.[26] As they enter adolescence, children form their own groups – and some become leaders as they pull away from their parents, and increasingly make their own choices.

"Kid, you'll move mountains!"

- Dr. Seuss

Developing the leadership skills of adolescents equip them with the tools needed to become a valuable resource in both their schools and their communities as they learn to problem-solve and become mentors and role models.[27] In addition, the researchers noted that leadership development has been linked to adolescent exposure to and engagement in activities beyond their academic curricula – which allow them to master the ability to develop healthy interpersonal connections, peer support, social integration, community ties and a commitment to a culture of helping others.[27]

The Need for Change

Experience in middle school age is a critical determinant of the future success of a student – and the fate of a nation as a whole. Exposure to a wide array of positive stimuli could help enhance imagination and creativity among adolescents. New ideas, acquired through reading extensively, travelling widely, and living in different parts of the world, among

others, can act as those crucial stimuli that can enhance imagination and enable leadership in thought and in action. Just knowing facts and concepts are not going to be enough any longer to guarantee success. The ability to relate new knowledge to prior knowledge, to see patterns and connections between different examples of the same concept, and to sort and process the ever-expanding information base is a critical skill for the 21st century.[28]

It will be crucial for the society to ensure exposure to opportunities and stimuli that can equip middle school age children with skills that will enable them to advance Science, nurture Self, serve Society, while successfully contributing in the new age knowledge economy.

References

1 https://www.understood.org/en/learning-attention-issues/signs-symptoms/developmental-milestones/developmental-milestones-for-typical-middle-schoolers

[2] Jacquelynne S. Eccles. The Development of Children Ages 6 to 14. The Future of Children WHEN SCHOOL IS OUT Vol. 9 • No. 2 – Fall 1999

[3] Erikson, E.H. Identity, youth and crisis. New York: W.W. Norton and Company, 1968.

[4] Higgins, E.T., and Parsons, J.E. Social cognition and the social life of the child: Stages as subcultures. In Social cognition and social development. E.T. Higgins, D.N. Ruble, and W.W. Hartup, eds. Cambridge, MA: Cambridge University Press, 1983, pp. 15–62

[5] Eccles, J.S., Wigfield, A., and Schiefele, U. Motivation to succeed. In Handbook of child psychology, 5th edition: Vol. 3, Social, emotional, and personality development. W. Damon and N. Eisenberg, eds. New York: Wiley, 1998, pp. 1017–95.

[6] Harter, S. The development of self-representation. In Handbook of child psychology, 5th edition: Vol. 3, Social, emotional, and personality development. W. Damon and N. Eisenberg, eds. New York: Wiley, 1998, pp. 553–618.

[7] Cole, D.A. Preliminary support for a competency-based model of depression in children. Journal of Abnormal Psychology (1991) 100:181–90.

[8] Parkhurst, J.T., and Asher, S.R. Peer rejection in middle school: Subgroup differences in behavior, loneliness, and interpersonal concerns. Developmental Psychology (1992) 28:231–41.

[9] Bagwell, C. L., Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent friendship and peer rejection as predictors of adult adjustment. Child development, 69(1), 140-153. Available at: http://www.academicroom.com/article/preadolescent-friendship-and-peer-rejection-predictors-adult-adjustment.

[10] Chen, Z. Y., & Kaplan, H. B. (2003). School failure in early adolescence and status attainment in middle adulthood: A longitudinal study. Sociology of Education, 76(2), 110-127. Available at: http://www.jstor.org/stable/3090272?seq=1#page_scan_tab_contents.

[11] Duckworth, K., Duncan, G. J., Kokko, K., Lyyra, A. L., Metzger, M., & Simonton, S. (2012). The relative importance of adolescent skills and behaviors for adult earnings: A cross-national study. Department of Quantitative Social Science Working Paper, (12-03). Available at: http://inid.gse.uci.edu/files/2011/03/The-relative-importance-of-adolescent-earnings-INID-copy.pdf.

[12] Dubow, E. F., Huesmann, L. R., Boxer, P., Pulkkinen, L., & Kokko, K. (2006). Middle childhood and adolescent contextual and personal predictors of adult educational and occupational outcomes: A mediational model in two countries. Developmental psychology, 42(5), 937. Available at: https://www.researchgate.net/profile/Eric_Dubow/publication/6835875_Middle_child hood_and_adolescent_contextual_and_personal_predictors_of_adult_educational_and _occupational_outcomes_A_mediational_model_in_two_countries/links/0912f50e458a 38a354000000.pdf.

[13] Gevrek, D., Gevrek, Z.E., & Guven, C. (2015). Benefits of education at the intensive margin: Childhood academic performance and adult outcomes among American immigrants. Eastern Economic Journal, 41(3), 298. Available at: https://www.econstor.eu/bitstream/10419/107468/1/dp8697.pdf.

14 Andersson, H., & Bergman, L. R. (2011). The role of task persistence in young adolescence for successful educational and occupational attainment in middle adulthood. Developmental psychology, 47(4), 950. Available at: http://psycnet.apa.org/journals/dev/47/4/950/.

[15] Fergusson, D. M., Lynskey, M. T., & Horwood, L. J. (1997). Attentional difficulties in middle childhood and psychosocial outcomes in young adulthood. Journal of Child Psychology and Psychiatry, 38(6), 633-644. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1469-7610.1997.tb01690.x/full.

[16] Mahoney, J. L., Cairns, B. D., & Farmer, T. W. (2003). Promoting interpersonal competence and educational success through extracurricular activity participation. Journal of educational psychology, 95(2), 409. Available at: https://www.researchgate.net/profile/Joseph_Mahoney5/publication/228691048_Prom oting_Interpersonal_Competence_and_Educational_Success_Through_Extracurricular _Activity_Participation/links/5775c76108aead7ba070028e.pdf.

[17] Spengler, M., Brunner, M., Damian, R. I., Lüdtke, O., Martin, R., & Roberts, B. W. (2015). Student characteristics and behaviors at age 12 predict occupational success 40 years later over and above childhood IQ and parental socioeconomic status. Developmental psychology, 51(9), 1329. Available at: https://www.researchgate.net/profile/Brent_Roberts/publication/279807627_Student_Characteristics_and_Behaviors_at_Age_12_Predict_Occupational_Success_40_Years_Later_Over_and_Above_Childhood_IQ_and_Parental_Socioeconomic_Status/links/559ee3fb08aeffab5687d18c.pdf.

[18] MacNeil, C. A. (2006). Bridging generations: Applying "adult" leadership theories to youth leadership development. New Direction for Youth Development, 13-25.

[19] Wade, R. C. (1997). Community service learning. New York, NY: State University of New York Press.

[20] Zimmerman, B. J. (2006). Enhancing students' academic responsibility and achievements: A social-cognitive self-regulatory account. In R. J. Sternberg, & R. Subotnik (Eds.), Optimizing student success in school with the other three Rs: Reasoning, resilience, and responsibility (pp. 179-197). Greenwich, CT: Information Age.

[21] Sacks, R. (2009). Natural born leaders: An exploration of leadership development in children and adolescents. Ottawa, Canada: Heritage.

[22] Gardner, J. W. (1987). Leadership development: Leadership papers. Washington, DC: Independent Sector.

[23] Lavery, S. D., & Hine, G. S. (2013). Catholic school principals: Promoting student leadership. Catholic Education: A Journal of Inquiry and Practice, 17 (1). Available at: http://digitalcommons.lmu.edu/ce/vol17/iss1/3

[24] Sternberg, R. (2008). The WICS approach to leadership: Stories of leadership and the structure and process that support them. The Leadership Quarterly, 19, 360-371.

[25] Shiner, R. L., & DeYoung, C. G. (2009). The structure of temperament and personality traits: A developmental perspective. Oxford Handbook of Developmental Psychology, 1-58.

[26] Sternberg, R. (2005). WICS: A model of giftedness in leadership. Roeper Review, 37-44.

[27] Rose-Krasnor, L., Busseri, M. A., Willoughby, T., & Chalmers, H. (2006). Breadth and intensity of youth activity involvement as contexts for positive development. Journal of Youth and Adolescence, 35(3), 365-379.

[28] Erickson HL. Concept based teaching and learning. IB position paper. International Baccalaureate Organization 2012. Available at: http://www.ibmidatlantic.org/Concept_Based_Teaching_Learning.pdf