

5

Rewards at Home

Rewards given to children by their parents, some of them given unknowingly, encourage learning everything from first words to the importance of deferred gratification and setting high but achievable goals. Appropriate use of rewards at home also helps create the grit or internal drive that supports lifelong learning and success.

Early Childhood Learning

Parents are children's first, most constant, and usually most important teachers. Parents can help their children remain focused even in the face of difficult, time-consuming tasks, a valuable trait for sustained success¹ and overcoming beliefs in inevitable failure.² These parental contributions can do much to help a child grow and mature psychologically.

Children learn to communicate with their parents well before they learn to talk, but to communicate well, children require more developed language skills. In a famous longitudinal study, Betty Hart and Todd Risley found parents' interactions with their children both inside and outside the home were strongly associated with their children's later IQ scores.³ Children whose parents gave them more direct attention and involved them in frequent, high-quality conversations were more likely to develop stronger language skills over time. Similarly, households in which preschoolers regularly talked with their mothers, learned new vocabulary, were read to, and experienced nurturing, structured discipline were better prepared for school than preschoolers who did not experience such positive learning opportunities.⁴

Younger children especially benefit from concrete and immediate rewards for learning behavior. The earlier parents begin carefully planning goals and aligned rewards, the better for the child.⁵ Parents can design meaningful goal-setting and learning habits with household routines and other activities such as family outings and vacations.

Parents may impose bans on playing outside or engaging in hobbies until the day's homework is done: These are everyday goals and aligned rewards. Some parents promise and plan entertaining activities such as a trip to the zoo or park in exchange for finishing homework or good grades in a child's most frustrating subject. Rewards can shape children's daily household activities as parents reinforce children's responsibility for their own learning, especially by encouraging leisure reading and other academically constructive activities.

Stanford economist Caroline Hoxby recalls that when she was young her mother rewarded her with caramels after daily piano practice. After she developed the self-discipline and music skills to enjoy playing for its own sake, Hoxby did not even notice she no longer needed the treat as an inducement to practice. Such acquired persistence pays off in other circumstances, including schooling. Angela Duckworth and Martin Seligman found that a student's level of self-discipline was twice as strong a predictor of school grades as IQ.⁶

Intentionally or not, parents set goals for themselves and their children. By imitating parents, children and adolescents learn how to plan meals, care for themselves, and manage their time. Parents who rely on authoritarian discipline expect their children to obey rules without question but deprive them of practice in setting goals. They may reward good behavior, but they prevent their child from helping to create cooperative family rules. On the other hand, excessively permissive parents offer too few guidelines and their children fall prey to minute-by-minute whims. "Moderate authoritative" rather than "authoritarian" parenting seems best, along with teaching children age-appropriate ways to set goals and to self-reward new learning as it unfolds.⁷

Eating habits are an early and obvious set of family routines that have long-lasting effects. When Sarah Anderson and Robert Whitaker looked at the relation between household routines and obesity among preschoolers living in the U.S., they found several useful guidelines for reducing child obesity.⁸ Children who ate more than five family meals at home per week, slept at least 10.5 hours per night, and participated in fewer than two hours

of screen-viewing activities per weekday were less likely than others to be obese. Adding even one of these routines seemed beneficial, but children whose families practiced all three were 63 percent less likely to be obese than those who did none. It is not clear what causes what; perhaps all of these are simply common indicators of healthy child rearing.

Parents' responses to their children's emotions teach children self-control. Rewards can be a key part of this process. Parents who employ a problem-solving approach to their children's emotional outbursts teach their children how to better control their emotions.⁹ A parent might say, "Tell me why you are upset" in response to a child's screaming or crying, or "I see that you are angry because you wanted to play with that toy first. How can we make sure you get a turn? Should I set the timer for ten minutes for both of you?" Parents who respond emotionally to their children's outbursts can reinforce cycles of tension that tend to accelerate over time. Overly distant and overly controlling parents can limit a child's growth.¹⁰ Finding humane, thoughtful ways to help children while at home helps them learn to care for themselves and succeed outside their homes.

Learning at Home

Nearly all children are "home schooled" during their first four or five years before being enrolled in a formal school. Growing numbers of students – approximately 1.7 million to 2.1 million¹¹ – continue to be schooled at home after they are old enough to attend conventional schools, but in some capacity all students continue to be, or should be, substantially "home schooled" for their entire K–12 careers. This is because in their first 18 years, only about 12 percent of children's time (when they're not sleeping) is spent in school.

Some parents do all they can to ensure their children rank first in all their academic classes in school. Best-selling author Amy Chua, for example, described herself as a "Tiger Mother" and was much ridiculed for her impressive and successful efforts to gain her daughters' entrance to Ivy League universities and for one to even make a solo performance at Carnegie Hall.¹² Her book, *Battle Hymn of the Tiger Mother*, noted that rigorous family emphasis on achievement is common in Asian cultures. It sparked a national debate about parents' roles in educating and pushing children to achieve.

Research shows children with devoted parents are likely to learn far more than others.¹³ Parents can create a learning environment at home by

having on hand age-appropriate personal or library-borrowed books and if they can afford it, art supplies, musical instruments, and electronic devices such as personal computers and tablets, which continue to fall in price. Many of these items can be purchased inexpensively at second-hand stores, such as Goodwill. Since children quickly outgrow many of these learning aids, it is a good idea to get in the habit of buying them used and then donating them when finished.

An extensive array of educational software is available from which parents can choose. Leaders in this field are Broderbund, creator of the Mavis Beacon typing software and Carmen Sandiego games, and Knowledge Adventure, with online and downloadable games in all fields for all age ranges.¹⁴ The Core-Learning website offers a treasure trove of software and other resources for parents along with extensive reviews of education software.¹⁵

Excessive time spent watching television and playing video games is negatively associated with academic achievement, as well as positively correlated with child obesity, although the research is somewhat causally inconclusive.¹⁶ While television may appear to be a free substitute for a babysitter, it can distract children as well as their parents from activities more likely to prompt learning and instill good habits such as playing board games, reading, painting, drawing, dancing, and participating in sports.

Activities that encourage learning should continue all the way through high school. Even though mom and dad may not be able to help much with chemistry, biology, and calculus homework, they can make sure there is a place for quiet study, that books and online resources are available, and that the usual preoccupations of young adults do not interfere with school work. At each stage of a child's development, age-appropriate rewards – from fruit or a trip to the park for infants to being able to use the car and staying out late on a weekend night for a teenager – are constructive parts of parenting. Reward systems need to be deliberately and carefully designed and then followed so that rewards are reliably given (or withheld) to help accelerate children's learning.

Homework

Once a child is enrolled in school, the time for homework starts. Sending children home from school with homework is a long tradition that has come under criticism by some psychologists and writers for being a form of punishment.¹⁷ However, a recent review of research published from

1987–2003 conducted by a team of researchers from Duke University found “all studies, regardless of type, had design flaws, but there was generally consistent evidence for a positive influence of homework on achievement.”¹⁸ The strongest effect of homework on achievement occurred for students in grades 7–12.¹⁹

Students who learn to delay gratification while young are most likely to focus while they complete challenging homework assignments. All children and adolescents, however, can benefit from parent involvement in their homework. In a review of more than a dozen studies, such involvement resulted in higher rates of homework completion, fewer problems with assignments, and higher levels of achievement.²⁰

Parents who thoughtfully encourage their children during homework reinforce the learners’ persistence and nurture their evolving self-control. Such remarks might include “You can do it – it just takes hard work” or “Do not give up, you’re almost finished.”

Academic homework can be assigned by parents as well as by teachers. The Swann children – all ten of them – became renowned in the 1990s for graduating high school by the ages most students begin.²¹ The oldest child in the family, Alexandra, emphasized she and her siblings were not geniuses. They just worked hard on a constant schedule. The family did not take summer vacation from school and their mother required them to understand all the material at hand before moving on. Alexandra and her sister Victoria earned bachelor’s degrees at age 15 and master’s degrees at age 16.

Though the Swanns’ experiences are unusual, with access to new digital learning opportunities and greater flexibility of work hours and telecommuting, similar stories are becoming more common. Hard-working students may be ready to leave high school for college well before turning 17 or 18 and would gain little benefit from additional “seat time.”²²

After-School Activities

Parents can help their children choose stimulating after-school activities and build networks with other families to ensure their children spend their time constructively. Learners whose families help them identify suitable activities show higher levels of academic achievement than learners who do not participate in such activities.²³ Though many are not as rigorous as scientists would desire, studies across a wide range of programs and demographic groups show children in families with high-quality

parent-child interaction, community support, and access to needed resources outside the school are more likely to become productive members of society.²⁴ One long-term study showed the Chicago Parent Centers, which combined child-rearing instruction with solidarity among parents, yielded favorable long-term results on school achievement and adult outcomes measured as late as age 26.²⁵

Participating in constructive after-school activities, whether based at the school or hosted by other organizations such as churches and private clubs, creates new opportunities for children to learn from other children and adults. For parents it offers the opportunity to build bonds with other adults who can help them cope with the challenges of parenthood. Privately provided preschool and later out-of-school activities allow like-minded people such as those in various ethnic and religious groups to strengthen their joint interests. Children may benefit from the support of multiple adult caregivers and role models and from opportunities to gain recognition for their accomplishments and learning about their heritage. After-school activities in churches and private clubs – i.e., outside the regular school environment – provide children with a social group of their peers that is largely independent of their peers at their K–12 public school. For those who aren't fitting in well at school – especially in the middle-school years – these alternative peer groups may be particularly important.

After-school programs can be rich with opportunities for learning as well as effective use of rewards. Many programs recognize different levels of achievement and reward successful competitions with certificates, badges, and other forms of recognition for focused effort devoted to mastering a skill from reading poetry to learning to swim. Disciplined practice, which is so essential to mastery and advancement to higher levels of skill, may be easier in the presence of other students of similar skill levels who can help celebrate successes and commiserate over failures.

Parents can use enrollment in desirable programs as a reward for doing homework, high grades, or accomplishments in after-school programs. Other students or adults can be identified as role models simply by praising their efforts and achievements. Like other reward systems this must be accomplished without discouraging initial efforts or setting unrealistic goals. Goals should not be set too low, either: Students who graduate from high school with shelves filled with “participation trophies” without having demonstrated proficiency or a high level of skill may enter adulthood with inflated self-esteem and place unrealistic demands on colleges or employers

for easy recognition and advancement. Success requires communicating with children about how and why goals are set and making the connection to rewards transparent.

As mentioned in the Introduction, participation in sports creates important opportunities for learning such skills as patience, persistence, teamwork, and goal-setting. Participation in sports also teaches the importance of practice to improve skill execution. The experience reported by Andrew Snow, a college student, that being part of a high-school basketball team was the experience that “best prepared me for college,” is not at all uncommon.²⁶ Research finds sports as well as participation in clubs and organized activities produce beneficial effects on high-school graduation rates, college attendance, and civic responsibility, sometimes sufficient to overcome the negative effects of poverty and broken homes.²⁷ At least some of the positive effects of these activities can be traced to the positive feedback and rewards commonplace in such programs.

Sociologist James Coleman argued that strong relationships between parents and children within families, among parents within and across families, and between families and community organizations can provide a better environment for child-rearing and education.²⁸ He argued that solidarity among parents from different families could weaken the “adolescent society’s” tendency toward school alienation and preference for entertainment, dating, and clothes over academic work. Stimulated by the work of economists, Coleman called the result of this social interaction “social capital.”

As children grow older, their need for support from social capital becomes larger. Part-time and summer jobs were once a way for older children to connect with adults outside their own families, but this may be becoming less common. Laws requiring higher minimum wages and a record-slow recovery from the “Great Recession” of 2007–08 have made such jobs scarce. Meanwhile, more parents seem willing to give their children more than a token weekly “allowance,” giving adolescents incomes without the need to find jobs. Economist Julian Simon said “it makes sense that in a time when jobs for school leavers are hard to come by, and while there is support available from the community and from the family, youths show the opposite of constructive effort – rebellion against the system, wanton attacks on persons and property, and self-destructive drug and alcohol abuse.”²⁹ Of course, not all students react this way.

Rewards and the Culture of Poverty

If affluence creates perverse incentives for some children, a “culture of poverty” severely limits the opportunities other children have to benefit from structured play and enrollment in out-of-school programs.³⁰ This culture may include machismo, severely authoritarian decision-making, and disdain for education. The culture may accept resignation and passivity before life’s challenges and even caregivers abandoning their children because of substance abuse. Some individuals living in a culture of poverty seem to live for the moment, ignoring the past and opportunities to plan for the future. Nevertheless, some children rise above such circumstances.³¹ Connecting with other children and their families through after-school programs is often a constructive lifeline for these children.

Access to out-of-school resources is especially important for children from impoverished or broken homes.³² Cultural and economic conditions limit parents’ goal-setting and incentives for their children, whereas higher family income and wealth allow parents to provide better opportunities for their children – starting with where the family lives, which can be a determining factor in the quality of the schools, personal safety, and access to other community assets. Wealthier families can afford to send their children to private schools and pay for uniforms and equipment for sports teams. They may have multiple vehicles for transporting children back and forth from practices, rehearsals, and events, and perhaps a stay-at-home parent who can oversee the complicated schedule.

Nevertheless, middle-income and even poor families often can provide their children with similar but less-costly opportunities to learn outside school. One way is to utilize the extensive network of free or inexpensive clubs and facilities that often are nearby. YMCAs, YWCAs, Boy Scouts, Girl Scouts, Boys and Girls Clubs of America, park district or city-sponsored sports leagues, libraries, and programs provided by colleges and many private clubs are just some of the opportunities located in middle- and low-income communities.

“Surrogate parents” can extend social capital’s lifeline to young people who otherwise would drift away. Asenath Andrews, principal of the Ferguson Academy for Young Women in Detroit, presides over a school that enrolls only pregnant unwed teen mothers very likely to drop out of school, yet the school graduates 95 percent of its students. The school admits young mothers, often born themselves to unwed mothers who dropped out of school, and attempts to break that cycle of poverty. It offers

a full-day nursery for their children while the mothers study and attend class.

This environment – and Andrews’ no-nonsense, motherly approach – enriches these young women’s impoverished social capital by introducing them to words, ideas, and experiences far beyond their dingy apartments and streets.³³ “There are estimates that by age 3, poor kids have heard 30 million fewer words than kids in middle-class families,” Andrews says. “That 30-million-word deficit keeps me awake at night. We’re trying to teach teenagers to talk to their babies. Well, there’s a whole vocabulary attached to a garden that these teenagers can share.”

Overcoming Adversity

Children can learn to change how they react to difficult circumstances and increase their resilience to challenges.³⁴ A constantly negative outlook or feelings of powerlessness can be transformed into a positive, growth-oriented outlook if their circumstances are changed for the better. Children who are stuck in terrible homes and are currently unable to make sense of their circumstances still have the potential to acquire these coping skills later. According to Dante Cicchetti and John Curtis, research indicates such resilience is likely when children plan ahead, look to the future when setting goals, use active coping strategies, and directly confront their fears.³⁵

Large-scale longitudinal studies have uncovered a number of ways people who experienced adversity in childhood became successful adults. Emmy E. Werner and Ruth S. Smith, for example, followed the entire birth cohort of children on the Hawaiian Island of Kauai for 40 years.³⁶ Among those who had one or more family risk factors such as mental illness, alcoholism, and drug addiction, one-third became caring, confident, employed adults. To use their language, the authors identified several “protective factors” leading to psychological “resilience” to family adversity. Two of the most consistent factors were a strong, enduring childhood bond with a caring, responsible non-parent caretaker such as a relative, babysitter, or teacher and regular activities with a religious or other charitable group.

With such adult supervision, children are more likely to receive material rewards, find friends, create supportive social relationships, and be exposed to cultural traditions that encourage a sense of heritage and resilience in the face of adversity. Given appropriate guidance, such social benefits strengthen a sense of purpose, a strong identity, and self-confidence. Think

of the way many Native American tribes consciously teach their ancient rituals and tribal dances to young children and how many Orthodox Jewish children attend Hebrew school either full-time or every day after conventional school is over. Children also benefit from opportunities to care for themselves and others. They may feel a sense of unity as they engage in teamwork and build an optimistic view of the world when they see tangible results from their efforts. Even when children grow up in fractured households, they can thrive if they receive constructive outside support.

The ability to adapt to adverse and changing circumstances is an important life skill, and as these examples suggest, external as well as internal motivation play central roles in allowing learners to acquire such ability. Children with the problem-solving skills necessary to bounce back from adversity are more likely to remain constructively optimistic and to succeed despite trauma, a significant threat, or even prolonged adversity.

Resilience in the face of life's adversities allows children to prevail through difficulties, and these habits of mind can be cultivated. Rewards not only nurture resilience, they teach learners about the good they can accumulate when persistence and teamwork are aimed toward goals larger than themselves.

Conclusion

Parents assist their children's learning at home in a wide variety of ways that benefit from the judicious use of rewards. Parent-directed learning begins almost from the moment of birth as infants learn the basic skills of eating and speaking and then washing hands, dressing themselves, and so on. Small and appropriate rewards for every step along the way are a natural and proper part of parenting, and research confirms these rewards are an effective way to teach life skills including self-discipline, deferred gratification, and perseverance.

As children grow older, parents can help their children learn by having their home well stocked with books, art supplies, musical instruments, and electronic and Internet-based educational devices. Avoiding non-educational television can be achieved by spending time on age-appropriate games, reading, and practice with painting, drawing, dancing, and sports.

When formal schooling begins, doing homework is often a child's first encounter with having to focus on and practice doing something that doesn't come from parents or isn't entertaining. It is an opportunity to

measure progress and reward success while instilling good habits and teaching study skills. Making sure homework is completed on time and helping their children remain constructively engaged in school connects parents to schools and to educators who are entering the child's life for the first time. Parents well connected with parents in other families are likely to be more helpful to their children and others' children.

As the child grows older, in-school and out-of-school activities become more important and offer opportunities to measure and reward academic achievement, self-discipline, and good habits. By the time high school arrives the child may be acting out, an entirely rational response (as Julian Simon pointed out) to the incentives children face. Marshaling resources of "social capital" in the community can help children become aware of the opportunities that lie ahead – college or career choices – and understand the value of acquiring the knowledge and skills that will be necessary for a life of independence.

Children coming from poor or dysfunctional families face special challenges, but research suggests incentives and rewards are no less and perhaps even more important in helping them learn life skills. Poverty may rule out some out-of-school opportunities, but many opportunities valuable to the learning process are available to families regardless of their income. Resilient children who witness violence, alcoholism, and drug abuse at home can rise above adversity and learn skills that equip them for success later in life. At each step, rewards can play an important role: small, frequent, and concrete at first, and then gradually less frequent and more long-term (such as the promise of being able to enroll in a desirable college).

Parents should not be misled by popular writers into thinking rewards are inappropriate or counterproductive in the home learning environment. Experience and research show just the opposite: Home is where rewards can be most needed and most effective. Parents have a special responsibility to use rewards because professional educators often can't or won't extend their involvement outside the schools.

Notes

1. Lisa S. Blackwell, Kali H. Trzesniewski, and Carol Sorich Dweck, "Implicit Theories of Intelligence Predict Achievement Across Adolescent Transition: A Longitudinal Study and an Intervention," *Child Development* 78, no. 1 (January–February 2007): 246–63.
2. Catherine Good, Joshua Aronson, and Michael Inzlicht, "Improving Adolescents' Standardized Test Performance: An Intervention to Reduce the Effects of Stereotype Threat," *Applied Developmental Psychology* 24, no. 6 (December 2003): 645–62.
3. Betty Hart and Todd R. Risley, "American Parenting of Language-Learning Children: Persisting Differences in Family-Child Interactions Observed in Natural Home Environments," *Developmental Psychology* 28, no. 6 (November 1992): 1096–105.
4. Jeanne Brooks-Gunn and Lisa B. Markman, "The Contribution of Parenting to Ethnic and Racial Gaps in School Readiness," *The Future of Children* 15, no. 1 (Spring 2005): 139–68.
5. Rucker Johnson and Robert Schoeni, *The Influence of Early-Life Events on Human Capital, Health Status, and Labor Market Outcomes Over the Life Course* (Berkeley, CA: Institute for Research on Labor and Employment, 2006).
6. Angela L. Duckworth and Martin E.P. Seligman, "Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents," *Psychological Science* 16, no. 12 (December 2005): 939–44.
7. Michael W. Pratt, Patricia Kerig, Philip A. Cowan, and Carolyn P. Cowan, "Mothers and Fathers Teaching 3-Year-Olds: Authoritative Parenting and Adult Scaffolding of Young Children's Learning," *Developmental Psychology* 24, no. 6 (November 1988): 832–9.
8. Sarah E. Anderson and Robert C. Whitaker, "Household Routines and Obesity in US Preschool-Aged Children," *Pediatrics* 125, no. 3 (March 2010): 420–8.
9. Nancy Eisenberg, Richard A. Fabes, Stephanie A. Shepard, Ivanna K. Guthrie, Bridget C. Murphy, and Mark Reiser, "Parental Reactions to Children's Negative Emotions: Longitudinal Relations to Quality of Children's Social Functioning," *Child Development* 70, no. 2 (March–April 1999): 513–34.
10. Wendy S. Grolnick and Richard M. Ryan, "Parent Styles Associated with Children's Self-Regulation and Competencies in School," *Journal of Educational Psychology* 81, no. 2 (June 1989): 143–54.
11. Home Schooling Legal Defense Association, <http://www.hslda.org/research/faq.asp>, viewed March 9, 2013.
12. Amy Chua, *Battle Hymn of the Tiger Mother* (New York, NY: The Penguin Press, 2011).
13. Arthur Reynolds and Suh-Ruu Ou, "Paths of Effects From Preschool to Adult Well-Being: A Confirmatory Analysis of the Child-Parent Center Program," *Child Development* 82, no. 2 (March–April 2011): 555–82.

14. See www.broderbund.com and www.knowledgeadventure.com, viewed March 13, 2013.
15. See www.corelearning.com; educational software reviews at <http://www.core-learning.com/pt-ctr-reviews.asp>, viewed March 13, 2013.
16. Anne Martin, David H. Saunders, Susan D. Shenkin, and John Sproule, "Lifestyle Intervention for Improving School Achievement in Overweight or Obese Children and Adolescents," *Cochrane Developmental, Psychosocial and Learning Problems Group*, March 14, 2012, DOI: 10.1002/14651858.CD009728; Tara Stevens, Lucy Barnard, and Yen M. To, "The Association Between Television Viewing and Achievement: The Impact of Optimal Viewing Across Time," *Teachers College Record*, January 26, 2009, <http://www.tcrecord.org> ID Number: 15498.
17. Alfie Kohn, *Feel-Bad Education and Other Contrarian Essays on Children and Schooling* (Boston, MA: Beacon Press, 2011), p. 61.
18. Harris Cooper, Jorgianne Civey Robinson, and Erika A. Patall, "Does Homework Improve Academic Achievement? A Synthesis of Research, 1987–2003," *Review of Educational Research* 76, no. 1 (Spring 2006): 1–62.
19. *Ibid.*
20. Erika A. Patall, Harris Cooper, and Jorgianne C. Robinson, "Parent Involvement in Homework: A Research Synthesis," *Review of Educational Research* 78, no. 4 (December 2008): 1039–101.
21. Alexandra Swann, *No Regrets* (Albuquerque, NM: Cygnet Press, 2010 [1989]).
22. Kathleen D. Noble, Sarah A. Childers, and Robert C. Vaughan, "A Place to Be Celebrated and Understood: The Impact of Early University Entrance From Parents' Points of View," *Gifted Child Quarterly* 52, no. 3 (Summer 2008): 256–68.
23. Harris Cooper, Jeffrey C. Valentine, Barbara Nye, and James J. Lindsay, "Relationships Between Five After-School Activities and Academic Achievement," *Journal of Educational Psychology* 91, no. 2 (June 1999): 369–78.
24. For a sample study involving twins, see Michel Duyme, Annick-Camille Dumaret, and Stanislaw Tomkiewicz, "How Can We Boost IQs of 'Dull Children'? A Late Adoption Study," *Proceedings of the National Academy of Sciences* 96, no. 15 (July 20, 1999): 8790–4.
25. Arthur J. Reynolds, Judy A. Temple, Barry White, Suu-Ruu Ou, and Dylan Robertson, "Age 26 Cost-Benefit Analysis of the Child-Parent Center Early Education Program," *Child Development* 82, no. 1 (January–February 2011): 379–404; Arthur J. Reynolds, Judy A. Temple, Dylan L. Robertson, and Emily A. Mann, "Long-Term Effects of an Early Childhood Intervention on Educational Achievement and Juvenile Arrest: A 15-Year Follow-up of Low-Income Children," *Journal of the American Medical Association* 285, no. 18 (May 9, 2001): 2339–46.
26. June Kronholz, "Academic Value of Non-Academics," *Education Next* 12, no. 1 (Winter 2012).

27. Michael J. Shanahan and Brian P. Flaherty, "Dynamic Patterns of Time Use in Adolescence," *Child Development* 72, no. 2 (March–April 2001): 385–401; Deborah Bobek, Jonathan Zaff, Yibing Li, and Richard M. Lerner, "Cognitive, Emotional, and Behavioral Components of Civic Action: Towards an Integrated Measure of Civic Engagement," *Journal of Applied Developmental Psychology* 30, no. 5 (September–October 2009): 615–27.
28. James S. Coleman, "Social Capital in the Creation of Human Capital," *American Journal of Sociology* 94, no. 1 (1988): S95–S120; and James S. Coleman, "Families and Schools," *Educational Researcher* 16, no. 6 (August–September 1987): 32–8.
29. Julian L. Simon, *Effort, Opportunity, and Wealth* (New York, NY: Basil Blackwell Ltd., 1987), p. 152.
30. See Oscar Lewis, "Culture of Poverty," in Daniel P. Moynihan, ed., *On Understanding Poverty: Perspectives from the Social Sciences* (New York, NY: Basic Books, 1969), pp. 187–220.
31. Jerome L. Singer, "Delay Gratification and Ego Development: Implications for Clinical and Experimental Research," *Journal of Consulting Psychology* 19, no. 4 (August 1955): 259–66.
32. Marian J. Bakermans-Krannenburg, Marinus H. van Ijzendoorn, and Robert H. Bradley, "Those Who Have, Receive: The Matthew Effect in Early Childhood Intervention in the Home Environment," *Review of Educational Research* 75, no. 1 (Spring 2005): 1–26.
33. Michele Owens, "Gardening to Save Detroit," *O Magazine*, April 2008, <http://www.oprah.com/world/Gardening-in-the-City-Changing-Detroits-Landscape>.
34. Richard J. Davidson and Sharon Bagley, *The Emotional Life of Your Brain* (New York, NY: Hudson Street Press, 2012).
35. Dante Cicchetti and W. John Curtis, "Multilevel Perspectives on Pathways to Resilient Functioning," *Development and Psychopathology* 19, no. 3 (Summer 2007): 627–9.
36. Emmy E. Werner and Ruth S. Smith, *Journey from Childhood to Midlife: Risk, Resilience, and Recovery* (Ithaca, NY: Cornell University Press, 2001).