Calls for schools to pay heed to children’s social and emotional learning have proliferated in recent years. Is the current enthusiasm for educating the “whole learner” a much-needed correction to the narrow concentration on academic skills in the modern reform era? Or is it a misguided retreat from academic rigor and an attempt to sidestep demands to hold schools accountable? In this forum, Robert Balfanz, research professor at Johns Hopkins University School of Education, argues that learning science favors an approach to schooling that addresses all aspects of development—social, emotional, and academic. In the companion essay, Grover “Russ” Whitehurst, nonresident fellow at the Urban Institute and professor emeritus of psychology and pediatrics at Stony Brook University, maintains that the current approach to social and emotional learning is misguided, and that the evidence does not support the claims.

WHAT DO K-12 SCHOOLS NEED to do to prepare their students for adult success? This was the question that originally catalyzed the standards-and-accountability movement some 30 years ago, though it seems somehow to have gotten lost. Today the question merits revisiting, because addressing it makes a strong case for taking an integrated approach to the social, emotional, and academic development of children rather than focusing on academics in isolation.

Calls for schools to develop the “whole child” are far from new. However, as the study of (continued on page 70)
education moves from a practice-based field to one that is more evidence-informed, it is becoming increasingly clear that developing students' social-emotional skills not only has value on its own, but, when based on emerging findings from the learning sciences, also improves academic outcomes.

If they are to thrive as adults, students clearly need to acquire a body of knowledge and fundamental academic skills such as reading, writing, and quantitative understanding. Moreover, since half of the living-wage jobs today are occupied by adults with bachelor's degrees, and most of the other half are held by those with some form of postsecondary credential (such as an associate's degree or industry certificate), K–12 education must focus on preparing all students for successful postsecondary schooling. The demands of the knowledge economy and the goal of giving every student access to it have been the fundamental drivers of “education reform” efforts and the standards-and-accountability movement over the past three decades.

Yet it is clear today, as it was 30 years ago, that adult success requires more than academic skills. It also demands the ability to take care of oneself physically and emotionally, get along with and work with others, and continue to learn in an ever-changing world. Employers have continually said that they seek employees who can collaborate, communicate, problem solve, and self-manage. Additionally, the social crisis of contemporary adulthood, manifested in rampant opioid addiction and a 30 percent increase in suicides since 2000, drives home the importance of emotional well-being.

This still leaves the question of how much time and emphasis K–12 schooling should devote to developing the different building blocks of adult success. Some say schools should focus on their traditional specialty—academics—and leave social and emotional development to families, houses of worship, and social institutions. There is, after all, only so much time in the school day, and the history of public education is punctuated with non-academic educational fads taking up time with little clear return.

However, this viewpoint presupposes a separation between academic progress and social-emotional development: it assumes that growth in one area is not essential or critical to progress in the other. Yet the evidence is clear that social, emotional, and academic development are interdependent. Stephanie Jones and Jennifer Kahn, in a recent synthesis of the evidence base, conclude that “decades of research . . . have illuminated that major domains of human development—social, emotional, cognitive, linguistic, academic—are deeply intertwined in the brain and in behavior. All are central to learning. Strengths or weaknesses in one area foster or impede development in others.” When educators approach these various streams of development in an integrated fashion, they become synergistic, and no tradeoffs are necessary.

The Science of Learning
A careful examination of what we know about learning illustrates this concept.

During the same 30 years that the standards-and-accountability movement grew and blossomed, learning science developed and became useful to educators. This research has shown that learning is not a “cool process” of programmable information processing. It cannot be organized to routinely occur without attention to internal motivations or external factors. Learning has social and emotional dimensions. It is a “hot process” influenced by complex and dynamic interactions of biology and environment, social interactions, human feelings and beliefs, and variable physiological and psychological reactions to environmental factors like stress and scarcity.

More specifically, several key findings from learning science drive home the importance of integrating children's social, emotional, and academic learning.

Human cognition is both amazing and limiting. We possess tremendous abilities to visually process information and store, integrate, retain, and recall knowledge over a lifetime. We can keep in our heads more than 150 social scripts on how to interact and with whom. But, within our brains, the circuits used for executive function, which organize our actions toward completing important tasks, are shut off when we sense immediate dangers. This makes sense from an evolutionary perspective: if you are sitting under a (continued on page 72)
Many personality psychologists today endorse the “five-trait” theory, which centers on the so-called Big Five personality traits: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. These traits, which are typically measured by self-report questionnaires, delineate an individual’s stable predispositions to respond in similar ways across a broad range of circumstances.

The soft skills that are often targeted in SEL curricula overlap substantially with aspects of the Big Five personality traits. For example, when the University of Chicago Consortium on School Research says that its model of social and emotional factors in education comprises “such interpersonal qualities as cooperation, assertion, responsibility, and empathy,” it is describing components of the Big Five personality traits.

The problem with SEL models that focus on traits and dispositions is that the influence of genetics looms large relative to that of any particular cultural institution, including schools. The Big Five personality traits are highly heritable. For conscientiousness, the estimate of heritability from the four most recent studies is 49 percent. In other words, the similarity of two children in their degree of conscientiousness is predicted strongly by the extent of their genetic similarity—identical twins will be much more similar than same-sex fraternal twins. Even more important in the present context, similarity in personality traits is not at all predicted by the children’s “shared environment,” that is, whether or not they are reared in the same family or attend the same school.

The expression of a trait such as conscientiousness is surely affected by the environment, but the influences upon it derive from idiosyncratic experiences that are often subject to selection based on an individual’s genetic makeup. Thus, two students, one high in conscientiousness and the other in extraversion, attending the same classes in the same school, will tend to seek out and be selected for environments that fit and strengthen their different propensities. The conscientious student may become editor of the class yearbook while the extraverted student becomes class president. These divergent paths expose the two students to different environments, which, in turn, impart distinctive sets of specific skills that can reinforce preexisting differences in personality traits. It is difficult to imagine how schools could stop this process from happening. And even if they did, the student who was more conscientious at the outset would still be more conscientious in the end.

SEL programs could accomplish (continued on page 73)
Maximizing learning is not simply about “filling up” the brain, but also about shaping it. Emotions play a key role here, as they can both limit and enhance brain-shaping experiences.

its to the human learning system, we need motivation, self-regulation, and freedom from distractions to sustain learning over time. This is why stress, scarcity, trauma, self-doubt, the day-to-day struggles of living in poverty, and disorderly classrooms all push back against learning.

More-active learning is more-successful learning, and it is often more “social” learning, too. To learn effectively with and from others, we need to know how to read social cues and communicate our level of understanding. This in turn requires an ability to develop trust with teachers and fellow students.

Throughout the elementary and secondary school years, children’s brains are still developing. Thus, maximizing their learning is not simply about “filling up” the brain, but also about shaping it. A student’s emotions play a key role here, as emotions can both limit and enhance brain-shaping experiences. A recent publication of the Aspen Institute’s National Commission on Social, Emotional, and Academic Development, titled The Brain Basis for Integrated Social, Emotional, and Academic Development, states that “emotional well-being promotes health, brain development, and optimal learning, while chronic and excessive stress and loneliness are toxic to brain development.” Students have more cognitive resources available for focusing on instruction when they know how to mediate the intensity and duration of their emotions.

In this 2018 report, Mary Helen Immordino-Yang and colleagues express how these core findings from learning science come together: “Productive learning environments attend to the trade-off between plasticity and efficiency in brain development, strategically offering activities that encourage flexible thinking along with those that encourage mastery of necessary building-block skills and knowledge,” they write.

Focus on the Student

Taken together, advances in learning science tell us that to maximize student learning, we need to recognize that the learning process is driven by an integration of academic, social, and emotional skills. If we shift our lens from instruction (what adults deliver) to learning (what students need to do), and understand the human limitations to learning, we can clearly see the fundamental roles played by motivation; self-regulation; the ability to mediate the impact of environmental, physiological, and psychological challenges; social interaction; and positive relationships. These are the outcomes at the heart of social-emotional development. Thus, a learning-science perspective argues that academic achievement can improve faster with a whole-child approach rooted in the integration of social, emotional, and academic development. As measurement tools continue to evolve, and as interest in social-emotional learning grows, we are starting to see emergent evidence of this, most notably in numerous growth-mindset studies and in work by CORE, a partnership of eight California school districts that collaborate on new learning and teaching practices.

The exciting news is that this means there are still considerable tools at our disposal to realize the standards-and-accountability movement’s goal of ensuring that all students achieve sufficient levels of knowledge and academic skill. The challenge here is similar to that inherent in the learning process—that is, realizing the potential of an integrated social, emotional, and academic development approach to student success requires work. Teachers will need to learn how to teach differently from the way they were taught. At the heart of this will be building the (continued on page 74)
Social-and-emotional learning programs could accomplish much more by shifting their focus from abstract traits and dispositions to specific skills that are observable, close to the classroom, teachable, and linked in straightforward ways to the mission of schools.

Policy-Based Evidence Making

Advocates for school-based SEL programs promote evidence that they characterize as demonstrating that SEL works. The evidence gathering typically involves relaxing generally accepted standards of research quality (rigor and relevance) and turning a blind eye to discordant findings and reviews. This leads to what has been characterized as policy-based evidence making (as distinguished from evidence-based policymaking).

Policy-based evidence making typically entails the mash-up of large numbers of studies into an analysis that generates strong positive conclusions is GIGO (garbage in, garbage out).

Another hallmark of policy-based evidence making is the tendency to ignore contrary research. A salient example is the way SEL advocates have treated a groundbreaking research project carried out by the Institute of Education Sciences. It was a large-scale, multi-site study of schoolwide social- and character-education programs. Schools were randomly assigned to implement an SEL program or to continue with business as usual, and results were collected for students as they moved from 3rd through 5th grade. Findings are reported for the seven SEL programs as a whole and for each individually. The seven programs include some that SEL advocates often hold up as model programs with strong evidence of effectiveness, including PATHS (promoting alternative thinking strategies) and 4Rs (reading, writing, respect, and resolution).

The study found that for the seven SEL interventions analyzed collectively, only 2 of 60 estimated impacts were statistically significant. Some critics of the study have suggested this is because the study was (continued on page 74)
understandings and skills needed to create learning environments that are academically challenging and socially and emotionally supportive. Helping teachers acquire these new skills will in turn require a more substantial and sustained commitment to evidence-based professional learning opportunities than many school districts have traditionally demonstrated. We need to keep expanding our understanding of the optimal points along the K–12 continuum for developing key social-emotional skills in order to be most effective and maximize the impact on academic outcomes.

Finally, school-accountability systems will need to be retooled. Just as we have come to learn that it is ineffective to limit the feedback we give students to point-in-time summative judgments (ranging from “Congratulations, excellent work, keep it up” to “Disappointing; you need to work harder next time”), so it is for feedback provided to schools. Basing accountability on student scores from a single annual test in just two academic subjects provides guidance that is too limited to foster school improvement. There is more work ahead to determine how to incorporate learning science and social-emotional measures into an integrated feedback system that helps identify the actions needed for schools to make progress.

Focusing on the “whole child” by taking an integrated approach to social, emotional, and academic development does not have to come at the cost of lessening the focus on academics or decreasing vigilance regarding school outcomes. Quite the opposite. This approach is a necessary driver of both kinds of learning. Thus, the choice between academic gains or social-emotional improvements is a false one. If we make full use of our knowledge of human learning and development, we can create scholastic environments that tap into the rich symbiosis that connects students’ cognitive, social, and emotional dimensions—and we will come closer to providing schools in which every student develops the full range of skills needed for adult success.

### Summing Up
Social and emotional learning is important to student success. But try as they might, schools are not going to succeed in making shy students extraverted, careless students meticulous, or contentious students agreeable (or, for that matter, slow students smart). Schools can, to be sure, teach students specific social and emotional skills that they can deploy for advantage in particular situations. For example, the shy student can learn to make eye contact on introductions, the careless student to run a spell check before submitting a class paper, and the contentious student to suppress criticism when it is likely to be counterproductive.

A number of questions need addressing before we can expect SEL to catalyze students’ successful adaptation to the demands of school and life: When and how do we teach social and emotional skills? Which skills should we select? And to which categories of students do we attempt to teach the various skills? Making progress on that bundle of questions will require more than enthusiasm for SEL. It will necessitate specific and well-grounded hypotheses about those questions, and it will require valid measures of success. The slope of the learning curve from this enterprise will depend on the quantity and quality of evidence that is brought to bear on what works and why. That is hard and incremental work, but I know of no other way for social and emotional learning to achieve a permanent and productive place in the mission of schools.