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**Beyond Content: Incorporating Social and
Emotional Learning into the Strive
Framework**

Volume I: Social and Emotional Competencies and
their Relationship to Academic Achievement

August, 2013





Every child. Cradle to career.

A Letter from the Strive Task Force on Measuring Social and Emotional Learning

Mainstream education has traditionally put an emphasis on mastery of core academic content, particularly since the inception of “No Child Left Behind.” However, emerging research is demonstrating that other, non-content competencies are important to success in school and career. The Strive Network is focused on supporting this full range of competencies in our communities.

Recognizing a connection between building social emotional competencies and academic success, and hearing much interest in the subject within the Network, the Strive Cradle to Career Network launched, early this year, the *Task Force on Measuring Social and Emotional Learning* comprised of representatives from the Network as well as experts in the field. Our charge was to:

- Determine a menu of social and emotional competencies that are well related to achievement, are malleable, and that cradle-to-career partnerships can track and measure as part of their work
- Identify a set of scalable measures / assessments of these competencies

To accomplish these goals, Philliber Research Associates was engaged to study this complex and emerging field, and identify competencies and measures that met criteria decided upon by the Task Force, which placed an emphasis on improvement of student achievement.

The Task Force on Measuring Social and Emotional Learning is very pleased to offer this report entitled ***Beyond Content: Incorporating Social and Emotional Learning into the Strive Framework*** which fulfills the objectives identified above. This report has been developed to serve as a resource to the Network, helping guide its membership of cross-sector education partnerships as they identify competencies upon which to focus and to measure.

The Task Force’s approach to this research has taken into account the unique context of the Cradle to Career Network, specifically the nature of a *cross-sector* and *data-driven* method of improvement in which communities come together around an agreed-upon set of outcomes and data they want to improve. (see www.strivenetwork.org for more information on the Strive approach to improving student achievement.) Thus, throughout the research review, the emphasis was placed on identification of competencies and measurement of these competencies versus identifying best practice interventions. There is certainly value in understanding what is working in terms of building these social and emotional competencies, which lead to improved academics, but as cradle-to-career communities know, often the solutions exist in their own backyards. So, a critical first step is

understanding what to measure and what the data are telling them before identifying solutions. Still, we have taken care to include competencies that are, in fact, malleable so that communities can find strategies to enhance these among their young people, should they choose to do so.

Organized into three volumes – Volume I identifying and defining competencies that are clearly related to academic achievement and are malleable, Volume II summarizing available measures in the context of the cradle-to-career continuum, and Volume III offering a compendium of assessment tools – this report serves as a foundational resource for cradle-to-career partnerships as they explore this emerging field. We hope that this report will also serve as a resource to the broader field, and that national organizations and foundations with an interest in “beyond content” learning will build upon this base as they seek to make advancements in academic achievement. We look forward to partnering in that endeavor as we know this is only the beginning of this important work.

The Task Force extends heartfelt thanks to Philliber Research Associates for their excellent work and, more importantly, their flexibility as we found our path on this part of our Roadmap. The Task Force also wishes to thank our working group who did the heavy lifting on reviewing materials and providing feedback – your dedication is much appreciated and has been invaluable to this report. And finally, thank you to the MetLife Foundation and Robert Wood Johnson Foundation for their generous support, without which this project would not be possible.

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To access the full three volume report, please visit: www.strivenetwork.org/resources/reports

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Social-Emotional Learning: An Introduction

This is Volume I of the three volumes created to assist Strive communities in understanding, choosing, and measuring social-emotional competencies along the cradle to career continuum. These volumes are entitled:

Beyond Content: Incorporating Social and Emotional Learning into the Strive Framework

Volume I: Social and Emotional Competencies and their Relationship to Academic Achievement

Volume II: A Summary of Measures by Competency and Stage of the Cradle to Career Continuum

Volume III: A Compendium of Social and Emotional Competency Measures

In the past two decades, a substantial literature has accumulated to show that there are other factors that affect academic achievement besides content learning and memorization of subject material. Alternatively called socio-emotional competencies, socio-emotional learning (SEL), noncognitive factors, or 21st Century skills, this cluster of attitudes, abilities, and skills has now been shown to be directly and in the case of some of them, strongly related to student academic achievement.

In Strive communities, where there is an intense focus on student progress, there is high interest in using the most effective strategies to achieve this important goal. These volumes are the result of an extensive literature review linking social emotional competencies with a solid research base that shows them to be related to academic achievement and demonstrates that they are malleable.

This volume includes:

1. Definitions and conceptual background information on five key competencies meeting these criteria.
2. A discussion of the research on these competencies and their relationship to various indicators of academic achievement.
3. Lists of studies linking these competencies to the Strive benchmark indicators of achievement across the cradle to career continuum.
4. An extensive bibliography on these competencies and the research that supports their value in academic achievement so that communities can learn more about incorporating them into their strategies for assisting students.

The Appendix to this volume also includes some information on two other competencies that may be of interest: critical thinking and creativity. These were not included in the main body of Volume I because of their more tenuous relationship to academic achievement.

This work has revealed several important things about our knowledge of SEL. First, while it is now quite clear that these competencies are important to student success, the definitions and categorization of these competencies lack clarity. Writers and researchers use the same words for competencies with somewhat different definitions and the same definitions are used for different concepts. This, in turn, leads to a vast number of measurement approaches. While we would not expect completely consistent usage, definitions, or measures for SEL, this field of study would profit by more consistency so that we could begin to accumulate more secure knowledge about the utility of each.

Secondly, not all of the competencies included here are non-cognitive and indeed, a recent piece by Conley (2013), argues that this label should be abandoned since all of these competencies include at least some cognitive processes. Rotherham and Willingham (2010) have argued that the label “21st Century Skills” is also inappropriate because these competencies are hardly new and have long been required for academic achievement to be maximized.

It is also clear that the competencies are not equally well-related to achievement, as we discuss in our reviews of each of the five we have chosen, and we are only beginning to understand how they are related to one another. For example, if a student possesses a high degree of academic self-efficacy, or belief in his/her ability to succeed in school tasks, that student is also likely to display high perseverance or grit on such tasks, since he/she expects to succeed.

Finally, while all of the competencies chosen here are indeed malleable across the cradle to career continuum, they are not all equally malleable and some require more intensive and earlier intervention than others. We yet have much to learn about how to maximize their acquisition.

Still, this review is being shared because SEL is clearly an additional strategy for Strive communities to use in enhancing student achievement. We are hopeful that the Compendium provides Strive communities with a resource for understanding, enhancing, and measuring their success in increasing achievement-related competencies among their young people.

3. Grit or Perseverance

Definition and Background

Here is another concept that is dealt with in different conceptual ways. Persistence is conceived as part of self-management by Zins and Elias (2006), while Farrington et al., (2012) used the general concept of “academic perseverance” to describe this noncognitive factor and included under that heading, grit, tenacity, delayed gratification, self-discipline and self-control. Still, while definitions and categorizations vary, they center around a core idea:

“To persevere academically requires that students stay focused on a goal despite obstacles (grit or persistence) and forego distractions or temptations to prioritize higher pursuits over lower pleasures (delayed gratification, self-discipline, self-control).” (Farrington et al., 2012).

Persistence is the “voluntary continuation of a goal-directed action in spite of obstacles, difficulties, or discouragement.” (Peterson and Seligman, 2004).

Grit is a “perseverance and passion for long-term goals.” (Duckworth et al., 2007).

“Grit, persistence or perseverance can be thought of as a certain stick-with-it attitude and determination that is maintained over time despite failure or setbacks.” (Chien, et al., 2012).

While grit is often associated with persistence over the long term, delayed gratification or self-control seem more commonly described as shorter-term strategies. The similar concept—self management—seems to be a little broader but inclusive of perseverance or grit:

“Self-management: regulating one’s emotions to handle stress, controlling impulses, and persevering in addressing challenges; expressing emotions appropriately; and setting and monitoring progress toward personal and academic goals.” (Payton et al., 2008)

Relationship to Academic Achievement

Farrington et al., provide a substantial review of the research on the relationship of academic perseverance and academic performance. Angela Duckworth has been a primary contributor to this body of research and many studies have used her long- and short-version scales to measure grit. Tough (2012) also reviews Duckworth’s research in some detail and Farrington et al. go so far as to label grit as “essential” to high achievement.

In a study of college students at the University of Pennsylvania grit was related to college GPA ($r=.34$) after controlling for SAT scores (Duckworth et al., 2007). Duckworth and colleagues also found a significant relationship of grit and grades among West Point Cadets, although the magnitude of this effect was lower than that found among students in her previous study. Another prominent study in this literature is the experiment created by Walter Mischel and colleagues where preschool children were promised two marshmallows instead of the one visible marshmallow if they would wait to eat the first one when the experimenter returned to the room (Mischel and Mischel, 1983). Waiting for the second marshmallow was predictive of higher SAT scores many years later (Shoda, Mischel and Peake, 1990). The authors of this work believed that those who showed more self-control had greater cognitive skills that allowed them to dream up distraction strategies with greater efficiency.

Other research also links grit or persistence with academic achievement. Academic outcomes used in this work include faster growth in reading from kindergarten through third grade (Newman et al., 1998), faster growth in both reading and math from kindergarten to fifth grade (Li-Grining et al., 2010), and less anxiety and less tendency to blame others while trying to solve difficult problems (Lufi and Cohen, 1987)

Malleability

Evidence suggests that children may not exhibit grit, perseverance or self-control across all situations and that these characteristics may change over time (Farrington et al., 2012), but Duckworth and colleagues have argued that grit is a stable personality trait (2007). Other authors believe that while grit is related to academic achievement, it is like conscientiousness—one of the important “big five” personality traits that predicts performance but it is rather stable.

Farrington et al., argue however, that academic perseverance, as opposed to perseverance as a general trait, can be changed in spite of personality.

“The research suggests that, while there may be little return in trying to make students more gritty as a way of being...students can be influenced to demonstrate perseverant behaviors...in response to certain classroom contexts and under particular psychological conditions.” (p. 24).

Strategies to teach perseverance directly have been tried but the research is yet sparse on the success of these. Other research has tried to increase perseverance through changing students’ academic mindsets or increasing the degree of belongingness students have toward their schools and classrooms (Dweck, Walton and Cohen, 2011). We have already reviewed evidence above that academic self-efficacy (belief that a student can succeed at an academic task) is associated with greater perseverance. Farrington et al., argue that it is unclear whether a focus on grit or perseverance would contribute very much to narrowing race/ethnicity gaps in achievement.

Overall, we conclude that grit or perseverance is well related to academic achievement but there is some debate about its malleability since it may be a rather stable personality trait. A promising strategy to increase perseverance is through creation of a classroom context that gives students a sense of belonging, builds their mastery orientation, teaches concrete strategies for learning, and thus increases students' likelihood of persisting in the face of academic challenge.

Grit or Perseverance: Articles

References to articles covering more than one age group are repeated.

Author	Measure	Intervention	Key Findings
Kindergarten Readiness			
McDermott et al. (2012)	Preschool Learning Behavior Scale (tests competence motivation, attitude toward learning, attention/persistence, and learning strategy)	None	The sample consisted of Head Start students aged three to six. Three factors (competence motivation, attention/persistence, and learning strategy) predicted future grades, achievement test scores and learning behaviors, with attention/persistence being the most predictive.
Shoda, Mischel, & Peake (1990)	The Marshmallow Test (tests self-control and delayed gratification)	None	Correlations were found between seconds of delayed gratification in preschool and cognitive competence and SAT scores in adolescence.
3rd or 4th grade literacy			
Dweck, Walton, & Cohen (2011)	Multiple (meta-analysis)	Multiple (meta-analysis)	In a meta-analysis of strategies that promote student tenacity, helping students learn self-control strategies increased grades and test scores in reading and math.
Liew et al. (2008)	Adaptive and effortful control was measured by: Ego-resiliency subscale of the California Child Q-Set, and two tasks (Walk-a-Line and Star) designed by Kochanska	Recommends the program Promoting Alternative Thinking Strategies (PATHS)	Adaptive/effortful control at 1st grade contributed to reading achievement at 3rd grade. For meeting the critical 3rd grade benchmarks in reading, early adaptive/effortful control is one of the pre-cursors of literacy achievement.
Newman et al. (1998)	15-item set of temperament questions, based on Martin's Temperament Assessment Battery for Children (TABC)	None	Persistence measured in kindergarten was a significant predictor of the growth rate of reading ability for children from kindergarten through third grade.
Zins & Elias (2006)	Multiple (lit review)	Recommends 13 SEL evidence based programs	The evidence based outcomes for teaching SEL include greater effort to achieve and academic performance improvements such as improved math and language arts skills, higher test scores, and increases in achievement overtime (elementary to middle school).

Grit or Perseverance: Articles

References to articles covering more than one age group are repeated.

Author	Measure	Intervention	Key Findings
	8th grade math		
Duckworth and Quinn (2009)	Short Grit Scale	None	In middle school and high school students, grit scores were positively correlated with GPA.
Dweck, Walton, and Cohen, (2011)	Multiple (meta-analysis)	Multiple (meta-analysis)	In a meta-analysis of strategies that promote student tenacity, helping students learn self-control strategies increased grades and test scores in reading and math.
Li-Grining et al. (2010)	ECLS-K's Social Rating System (based on the SSRS) Approaches to Learning Scale and Self-Control Scale	Correlational study. Recommends programs like Head Start and Tools of the Mind	The sample consisted of 1st, 3rd, and 5th graders. Results indicate a positive correlation between early approaches to learning (persistence, emotion regulation, and attentiveness) and individual trajectories of reading and math performance.
	High School Graduation		
Duckworth and Quinn (2009)	Short Grit Scale	None	In middle school and high school students, grit scores were positively correlated with GPA.
	College enrollment and completion		
Duckworth et al. (2007)	Grit Scale	None	Grit scores were positively correlated with GPA among Ivy League undergraduates.
Duckworth and Quinn (2009)	Short Grit Scale	None	In adults, grit scores were positively correlated with levels of educational attainment and fewer career changes.
Yeager & Dweck (2012)	Multiple (lit review)	Teaching growth mindset	Students who believe (or are taught) that intellectual abilities are qualities that can be developed tend to show greater academic persistence and higher achievement across challenging school transitions and greater course completion rates in challenging math courses in community college.

Grit or Perseverance: Articles

References to articles covering more than one age group are repeated.

Author	Measure	Intervention	Key Findings
Duckworth et al. (2007)	Grit Scale	Career/workforce	Grit scores were positively correlated with educational attainment and fewer career changes. Individuals who were a standard deviation higher in grit than average were 35% less likely to be frequent career changers.
Duckworth & Quinn (2009)	Short Grit Scale	None	In adults, grit scores were positively correlated with levels of educational attainment and fewer career changes.

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