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Positive Psychology Interventions in the Classroom for Students with Special Needs: First Book

Abstract

This paper sets forth the empirical and theoretical underpinnings and evidence-based activities that teachers of students with special needs in low-income schools can utilize to manage behavioral challenges. The authors identify applicable positive psychology resources, as requested by First Book, a non-profit providing member educators with resources that help children learn and seeks to accelerate implementation of innovative research in low-income schools. The authors, at the request of First Book, focus on emotional intelligence, growth mindset, self-regulation and character strengths, operationalizing these topics with a two-pronged approach: 1) specific actions teachers can take to build positive classrooms and 2) practical in-the-moment strategies teachers can apply when facing common classroom challenges. The authors include a detailed "Super Circle" intervention as an example of embedding positive psychology interventions into existing teaching practices. While the authors recognize the need for further research on the application of positive psychology tools to special needs populations, they remain hopeful that these recommendations will benefit teachers and students with special needs in low-income schools. Finally, the authors provide a measurement plan First Book could use to determine the effectiveness of the resources they create and provide to their members based on the research and recommendations contained herein.

Keywords

emotional intelligence, character strengths, growth mindset, self-regulation, mindfulness, special needs, low-income, educators, teachers, title one schools, First Book

Disciplines

Accessibility | Education | Other Teacher Education and Professional Development | Special Education and Teaching

Positive Psychology Interventions in the Classroom for Students with Special Needs: First Book

Jill G. Bell, Kellie Cummings, Mina Simhai, Arlen Solodkin

University of Pennsylvania

A Positive Psychology Service-Learning Project Submitted
In Partial Fulfillment of the Requirements for
MAPP 714: Applying Positive Interventions in Institutions
Master of Applied Positive Psychology

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Service-Learning Project

MAPP 714: Applying Positive Interventions in Institutions

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May 1, 2019

Abstract

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Introduction

First Book is a "nonprofit social enterprise focused on equal access to quality education for kids in need, providing educators with brand new, high quality books, educational resources, and other essentials to help kids learn" (First Book, 2019, p. 4). Their work is sorely needed in America and abroad, because poverty significantly affects education outcomes. For example, 80% of lower income 4th graders cannot read proficiently, compared with 49% of non-low income 4th graders (Anne E. Casey Foundation, 2014). First Book achieves its mission by providing books, warm clothing, school supplies, food, learning and other resources to its member educators (teachers in Title One schools, and others working with low-income children in various capacities, such as enrichment programs or Girls and Boys Clubs), at 50-90% discount off retail prices.

Kyle Zimmer, the CEO and President of First Book, launched this organization in 1992 along with two friends, in order to create a systemic solution to the problem of providing affordable, relevant books to low-income school districts (First Book, 2018). This bold vision led to the creation of a market-driven distribution model that has distributed over 175 million books and resources to children in need (First Book, 2018). Recently, First Book established its own proprietary research arm, called First Book Insights, which develops evidence-based knowledge to inform educators and create content for educational resources (First Book, 2018).

First Book is a unique national player in the nonprofit education service sector in North America. The \$2 trillion educational services sector in the U.S. is largely comprised of public elementary and secondary schools, universities, and colleges. First Book focuses on the educational support services component within the educational services sector, a minor portion of the sector (less than 10%), which has experienced a mere 1.2% growth rate since 2013

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(Educational services industry in the US: Industry market research report, 2018). First Book is also part of the educational book distribution industry because it provides books and additional resources to educators in low-income communities. First Book can be considered a key player in the publishing industry, even though it is not a publisher. Because First Book buys in such large quantities, it can strongly influence the types of books large publishers produce. Their influence in the development of new material is of immense value. The intersection between education and low-income children encompasses most U.S. schools. Fifty-one percent of students in the U.S. public school system are considered low income, and 44% of all U.S. children come from low-income families (First Book, 2017). While educational funding has slowly but steadily increased on the federal level, funding to low-income Title I schools, First Book's customer base, has decreased consistently since 2010, as many states have cut education spending per student by over 2% per year (Lynch, 2016). At the same time, the percentage of children living in lowincome families has increased from 39% in 2008 to 44% in 2014 (Yang, 2016). The overall number of children in the U.S. grew by 1% during that time while the number of low-income children, defined as living two-times above the poverty level, increased by 10%, and the number of children in poverty, defined as living at or below the U.S. poverty level, increased by 18 percent (Yang, 2016).

First Book is unique as a book distributor operating at the national level within low income communities with the reach and variety of products that First Book has to offer. While there are many local community groups who distribute books and resources to low-income students, First Book is the only one doing so on a large, national scale (J. Williams, First Book Director of Resource & Program Development, personal communication, January 23, 2019). In addition to partnering with publishers, First Book works with a vast array of community, state

and national partners who provide content, resources, and funding such as Feed the Children, Tools of the Mind, The Campaign for Grade-Level Reading (offering local programs), and The Collaborative for Academic, Social, and Emotional Learning (CASEL), in addition to foundations and corporations like Disney and Pizza Hut who are a major source of funding (Boyer, 2019; J. Williams, First Book Director of Resource & Program Development, personal communication, January 25, 2019).

The Appeal for Special Needs Support Materials

In a proprietary 2017 First Book member survey, 31% of First Book's members requested resources to support special needs students, making it the second most requested category for assistance (two other issues also tied for second place). Special needs resources (tied with another category) ranked as the number one resource that teachers are willing to spend their own money on. While many teachers were unsure what types of resources would be most helpful for kids with special needs, they did request calming products and resources for anger and anxiety management (J. Williams, First Book Director of Resource & Program Development, personal communication, January 25, 2019).

First Book is interested in building a pool of well-grounded positive psychology resources they can use to develop evidence-based special needs materials to help teachers manage behavioral disruptions in the classroom through their Accelerator Program, a program designed to implement innovative programs based on cutting-edge research in poor schools more quickly. In a 2015 survey with Molina Healthcare, First Book members identified ADHD/ADD, behavioral problems, anxiety, developmental delays, and speech/language problems as the most common special needs of their students (Boyer, 2016). Based on this survey and discussions with our sponsors at First Book, for purposes of this project, we define "special needs" as any

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variety of difficulties (such as a mental, physical, emotional, behavioral or a learning disability or impairment) that adversely affects a student's ability to learn and succeed in school. Accordingly, we have focused our research on behavioral needs, which is a subset of the prior definition, with an emphasis on classroom anger management, calming, and behavior management, regardless of whether there is a diagnosed disorder.

Our team has worked collaboratively with First Book's Engagement Team, specifically with our liaisons, Julye Williams who leads the Accelerator Program and Jules Appleton who runs the Network Insights Program. Ms. Williams and Ms. Appleton have helped us further define the types of materials that will be most helpful to teachers and to understand how positive psychology can provide a unique approach to helping children with special needs and behavioral problems. These programs are in charge of taking highly researched emerging techniques and best practices available in high-income schools and making them available to low income populations, reducing the time gap it takes for those tools to get from experts to schools with very little resources. To further define and narrow our scope, First Book identified preschool to middle school children (ages three -14) as the target population. After providing First Book with a wide selection of topics that could be useful to support kids with special-needs, they asked us to focus on: emotional intelligence, growth mindset, self-regulation (which includes goal setting), and character strengths for this population. We have added mindfulness practices throughout as a key lever to enhance application of these topics. Mindfulness is the practice of paying attention to the present moment. It is an act of self-regulation and attentional control which has been linked to lower levels of stress (Baime, 2011). These capacities are critical for school performance, school readiness, prosocial behavior, and academic achievement (Black, & Fernando, 2014).

The remainder of this paper is organized by each of the four topics listed above (emotional intelligence, growth mindset, self-regulation, and character strengths). We provide an evidence-based overview for each topic, followed by recommended targeted interventions that a teacher can use in the classroom with special needs students – and all students. Resources for further detail and exploration of each topic can be found in the appendices.

We also introduce an integrated intervention called Super Circle that incorporates all of the topics. In addition to the topic overviews and interventions, we include a measurement plan that First Book can use to assess the efficacy of the interventions and resources provided, specifically in the special needs' population.

Positive Psychology Topic Overviews and Recommended Interventions

The interventions we propose below focus on what is good within special needs students, so the goodness can be seen, appreciated, and built upon at school. They are valuable in helping with problematic behaviors both for children with special needs and for the entire student body, so they can be leveraged across a broad spectrum of classroom demographics.

Teachers are already busy and feel pressure to follow set curriculums so students can pass state mandated tests. Therefore, most of our proposed interventions are relatively small tweaks to things teachers are already doing instead of completely new big strategies. Each topic includes stand-alone practices that teachers can implement in their classrooms and "in-the-moment" interventions to help teachers respond to behavioral challenges as they occur. The Appendices (noted throughout) contain additional resources with corresponding links for each topic along with a problem-based matrix that identifies positive psychology practices to support special needs children according to the challenge they are presenting in the moment.

Although the interventions we recommend here are for teachers to use with their students, the concepts and many of the interventions we introduce are equally valid for adults, so can be helpful for teachers to develop their own resilience and coping tools. To that end, and to better equip themselves to teach these concepts, we strongly recommend that teachers experiment with these exercises on themselves first. For example, teachers can begin their own day with belly breathing, take the VIA strengths survey, and try the "Best Possible Self" activity (described in the following sections). We also recommend that First Book consider a teacher self-care toolkit in the future, incorporating these and other positive psychology constructs and interventions, such as resilience.

Emotional Intelligence

Emotional Intelligence Overview

Emotional intelligence (EI), a form of standard intelligence, is the ability to 1) use our emotions to help us reason, and 2) reason about the emotions we are feeling (Caruso, Salovey, Brackett, & Mayer, 2015). People high in emotional intelligence tend to have a strong sense of self-efficacy and social worth and create strong relationships with others. They are less likely to participate in violent behavior and self-destructive habits. Self-efficacy refers to our beliefs that we are capable of performing at required levels and we can influence the events in our lives (Bandura, 1994). Caruso and colleagues (2015) identify four branches of emotional intelligence: perceiving emotions, using emotions, understanding emotions, and managing emotions. Caruso and colleagues (2015) offer five steps to improving EI: *believing* that we can manage our emotions (self-efficacy); *monitoring* our moods and emotions accurately (self-awareness); *identifying* emotions that need to shift or be regulated (emotional knowledge and self-regulation); *employing* strategies to change our mood or emotion when needed; and *assessing* the

effectiveness of those strategies (self-determination and resiliency). Each of these steps requires intention, self-awareness, and practice.

EI is important for academic performance and behavior at school. Izard and colleagues (2001) studied five-year olds from low-income families, following up when the kids were nine years old. They identified *emotional knowledge*, the ability to recognize and name emotions, as a long-term predictor of positive and negative social behavior and academic competence. A study of low-income, urban, mixed-ethnicity third-graders found academic performance was influenced by the relationship between social-emotional competence and perceived teacher general and emotional support in the classroom, especially for African-American students (Elias & Haynes, 2008). These findings suggest that interventions designed to improve academic outcomes should include training on social-emotional development, especially emotional knowledge, and overall teacher supportiveness, emotional and otherwise.

Positive parenting and a child's own temperament or disposition are primary factors contributing to the development of emotional intelligence (Saarni, 2007). Ideally a child will experience early parental or caregiver attachment, but many at -risk, special-needs children in low-income homes and communities don't. Instead, they experience at least some of the following risk factors for underdevelopment of emotional intelligence: a depressive parent, shame, family instability, a high-degree of parental negative emotion targeted at the child, and domestic violence or spousal abuse. These risk factors can result in peer rejection, aggression (usually in boys), and depression (more often in girls). These children are prone to the emotional double hazards of negative emotion and the inability to pay attention, which can manifest as declining cognitive function over time and behavioral problems as early as pre-school (Lawson & Ruff, 2004). Yet, there is hope. Teachers, schools and communities can help at-risk and

special needs children by providing environmental consistency, guidance, support, caring, modeling, and opportunities for discussion and exploration of the broad emotional spectrum (Saarni, 2007). Teaching emotional intelligence should be part of the curriculum and a core value in school communities.

Emotional Intelligence Interventions

Getting started (First Book). We recommend that First Book organize classroom tools and resources for teachers according to eight social-emotional learning (S.E.L.) skills identified by Saarni (2007) for developing emotional intelligence. Each skill builds upon the prior skills as age appropriate (see *Appendix C*): 1) awareness of our emotional state, 2) discerning others' emotions, 3) expressing and naming our emotions, 4) empathy and sympathy for others' emotional experiences, 5) understanding that we, and others, do not have to express our inner emotions outwardly, 6) adapting and coping with distressing emotions using self-regulation, 7) awareness of the role of emotions in relationships, and 8) capacity for emotional self-efficacy.

Getting started (teachers). We recommend creating a culture of emotional intelligence in the classroom so that students deepen their awareness and understanding of their own and others' emotions. Teachers can do so by modeling and building and some of these practices into each school day:

Pre-school to elementary.

Welcome greeting. Ask each child how they are feeling when they arrive at school.

Have young children place a magnet, pin or picture on the bulletin board reflecting how they are feeling (sad, glad, mad, or afraid). Do the same as they leave for the day.

Emotions poster. Hang a poster of emotions in the classroom and use it to assist classroom activities revolving around S.E.L. learning skills. See *Appendix D* for example.

Emotion rhymes and songs. Introduce memorable rhymes and songs about emotions to help children learn how to manage emotions in real time, such as "when you feel so mad that you want to roar, take a deep breath and count to four" (Stanfield, 2015, p. 1). See *Appendix E*.

Pixar movie. Watch the Pixar movie "Inside Out¹" - or assign it for homework. Use the age-appropriate tools for discussion and exercises in Appendix F.

All ages (with age-appropriate resources like books).

Picture books and photos. Use picture books and photos to provoke conversations about emotions. Ask questions about how the characters in the book are feeling, what emotion they are feeling, and appropriate ways of behaving when feeling that emotion (Stanfield, 2015).

Games. Introduce games like "name the emotion," and "emotion bingo," to practice recognizing the broad spectrum of emotions and identifying emotional cues (Gibbs, 2017). See *Appendix G* for example.

Draw the emotion. Notice how an emotion feels in your body. Have students draw on a human picture where they feel the emotion they are experiencing (Kahn, 2013).

Mindfulness. Introduce age-appropriate practices of mindfulness like breath work or noticing sounds, smells and visual cues, and then name the feelings the surroundings evoke (Gibbs, 2017). For more on mindfulness please see page 27 (mindfulness breaks), and page 28 (belly breaths).

Late-elementary to middle school.

FADs and JELs. Differentiate between "FADs" and "JELs": FADs (Frustration, Anger, Desire, Sadness) are emotions that evoke strong, often uncomfortable reactions in our bodies and

¹ We note that Disney is already a First Book partner.

are short -lived. JELs (Joy, Enthusiasm, Love) are long-lasting and help us work better. Help students identify if an emotion they are feeling is a FAD or a JEL (Gibbs, 2017).

Journaling. Provide emotion journals and set aside time for students to identify and explore feelings they are experiencing, why or what situation provoked the emotion, and consider alternative ways of managing the emotion. Journals can be in words or pictures.

In-the-moment support. Negative emotions can escalate quickly, resulting in undesirable and explosive behavior. Rather than see this as a reason for punishment, teachers can view this as a learning opportunity. Let children know it's ok to feel and to talk about their feelings. The teacher can help a child in distress dig for the emotional roots of the behavior by having her name her emotion or point to a picture of the emotion she is feeling. Asking a student to identify if he is experiencing a "FAD" or "JEL" emotion will distance the child from the emotion itself by looking at it with curiosity. The teacher can also lead a child through a deep breathing exercise or ask him to draw a picture of how he is feeling and where he is feeling the emotion in his body. Finally, the teacher should remind the students that even though all emotions are ok, all behaviors are not, and help the children find appropriate ways to express negative emotions when they arise (Stanfield, 2015).

Growth Mindset

Growth Mindset Overview

Carol Dweck (2006), the leading growth mindset researcher, defines growth mindset as a belief that intelligence as well as skills and other abilities can be developed. Through this lens, adversity offers opportunities for learning and growth. People with growth mindsets seek out challenges, furthering their learning, increasing their practice and expertise, and obtaining better results (Claro, Paunesku, & Dweck, 2016). In contrast, people with fixed mindsets believe their

intelligence and talents are set and cannot grow with time or effort. They avoid new situations and challenges out of fear that failure could undermine their intelligence. Whereas a fixed mindset has a negative impact on overall performance and is a debilitating life factor (Claro et al., 2016), a growth mindset improves performance and is a life protective factor, particularly in moments of adversity, such as difficulties at school (Haimovitz & Dweck, 2017).

Dweck's (2006) growth mindset findings are especially relevant to education. Growth mindset is linked to high achievement, high motivation, how we perceive the world, the type of goals people pursue, attitudes at work and in relationships, and the way people educate their children. People with growth mindsets have higher levels of optimism and are more likely to achieve their potential (Dweck, 2006; Haimovitz & Dweck, 2017). Growth mindset facilitates learning, continued practice, setting high expectations, and learning from failure, while a fixed mindset lowers the bar and creates stagnation (Dweck, 2006).

Cultivating a growth mindset benefits kids regardless of their background and capacity level. A child with special needs and a fixed mindset could easily give up and consequently put forth minimal effort to learn (Aronson, Fried, & Good, 2002). Cultivating a growth mindset can build a student's sense of self-efficacy. Creating an environment where teachers emphasize effort, practice and commitment leads to better performance and better school experiences (Aronson et al., 2002). Kids work harder when they understand that effort is part of the learning process and that their aim as students is to learn, not just to pass or get good grades (Blackwell, Trzesniewski, & Dweck, 2007).

Socioeconomic background influences growth mindset cultivation, too. Low-income children are 50% less likely to develop a growth mindset than children from more affluent backgrounds (Claro et al., 2016). Yet not all children in low-income environments have fixed

mindsets; this finding has shed new light on ways to address the well-known relationship between low income and low achievement (Claro et al., 2016). A comprehensive, national study of all 10th graders in Chile found 1) growth mindset buffers against poverty's negative effects on achievement, and 2) mindset directly affects academic achievement in all income brackets (Claro et al., 2016). Dweck (2006) found that math grades of American seventh graders with growth mindsets steadily increased for two years, and the math grades of seventh graders with fixed mindsets decreased for two years. Further research needs to be conducted to understand how other factors, such as teachers' mindsets about students (with or without disabilities) might impact students' mindsets (Gutshall, 2013). It is clear that the way parents and teachers interpret success and failure and offer feedback affects students' mindsets (Haimovitz & Dweck, 2017). For example, in one study, teacher's mindset had a significant impact on students' behaviors and approaches to learning science, suggesting that stronger growth mindsets in teachers translate into stronger growth mindsets in students (Schmidt, Shumow, & Kackar-Cam, 2015).

Growth mindset can be taught. Usually the programs include teaching students how the brain works, and how, overtime, persistence and hard work strengthen brain connections. As mentioned above, teachers' mindsets impact students' mindsets, thus we recommend facilitating growth mindset training for teachers as well as students. While we address student-centric activities to build growth mindset below, there are several processes that influence teachers' mindsets which take place both during teacher-student interactions and among students (Haimovitz & Dweck, 2017):

1. Person or process praise and criticism. Process praise and criticism, which focuses on effort, persistence and learning have proven to enhance growth mindset, while

person praise and criticism, which focuses on intelligence, ability and talent tend to enhance fixed mindsets.

- 2. Beliefs about failure. Focusing on failure as an opportunity for growth enhances growth mindset; while seeing failure as debilitating and worth avoiding enhances fixed mindset.
- 3. Work revisions vs. work performance. The possibility of growth embedded in the opportunity to revise one's work offers a student evidence that one improves with effort, whereas focusing on tests and performance may hinder a growth mindset.
- 4. *Shared responsibilities*. Within classroom settings, when students and teachers share goals and responsibilities, they increase growth mindsets by sharing the process and the learnings along the way.

Growth Mindset Interventions

Getting started. Build teachers' skills and knowledge first. Note: The section on growth mindset in *Appendix I* contains many resources teachers can use to teach growth mindset in the classroom, especially the Khan Academy free resources and lesson plans.

Grow teachers' growth mindset. The first step to shifting students' fixed mindsets is for teachers to cultivate growth mindsets in themselves. In *Appendix I*, under Teacher and Classroom Resources, many links can be found that can facilitate this process for teachers.

Assess baseline growth mindset. Teachers can administer a growth mindset questionnaire (for kids over 12 years of age) to get a baseline understanding for their students. A second survey 6 months- 1 year later can measure progress. A growth mindset assessment is available for free at http://blog.mindsetworks.com/what-s-my-mindset.

The importance of language: use process praise. When teachers develop and demonstrate a growth mindset, their students do better. Process praise (or criticism) centers on the process and strategies used and builds a growth mindset (Haimovitz & Dweck, 2017). In contrast, person praise focuses on the person or result (i.e. "you are so smart" or "good, you got the right answer"), which builds a fixed mindset. Teachers can provide process praise feedback such as "I love the strategies you are using," or "wow, you have really persevered despite the challenges." Teachers can model growth mindset by thinking out loud, such as: "I know this is hard, but I will keep on trying." See *Appendix I* for additional suggestions.

Scaffold assignments. When students are required to turn in outlines, drafts, and multi-step assignments, and they receive and incorporate feedback along the way, they develop a growth mindset by experiencing their work improving with effort. Goal setting is an important scaffolding tool and it teaches persistence and motivation (Conzemius & O'Neill, 2009). Goal setting is explored further in the self-regulation section.

Teach brain malleability and the impact of physical health on brain development.

Teachers can cultivate environments that embrace, support and enhance growth mindset by sharing real-life examples of how the brain grows. The video in the embedded link https://www.mindsetworks.com/Science/Default#video-modal-window teaches students how good nutrition, sleep, and exercise support brain growth and how learning facilitates healthy brain development, all of which are mostly under older students' control (Cotman & Berchtold, 2002).

Learning from failure. Teachers can teach children how failures are opportunities for growth. The more you fail, the more opportunities you have to learn (Dweck, 2006). Teachers can model how practice enhances outcomes and how they have learned from mistakes.

In-the-moment support. These are strategies for helping children when they are upset.

Aggression and bullying behavior reduction. Teaching students about personality malleability has proven to enhance prosocial behavior even among kids who present behavioral problems regularly (Yeager & Dweck, 2012). Help students focus on the learning that stems from social interactions instead of focusing on a behavior critique or personal judgements. In this case, the teacher reads a story about a situation in which a student is bullying or being bullied and asks the students to imagine themselves in one of the roles. Ask students how they could respond in any of those situations in a way that would be good for themselves and for the other person (Yeager & Dweck, 2012). When conflicts arise, teachers can remind the students of this perspective-taking activity and about their ability to choose an alternative response.

The power of "yet." If a student says: "I can't do it," "I'm stupid," or "I don't get it," the teacher can coach the student to say "I haven't learned it yet" or, "this is really hard, and I've learned how to do hard things like this before." Showing students how to re-write these thoughts can build resilience and perseverance (Haimovitz & Dweck, 2017).

Self-Regulation

Self-Regulation Overview

Self-regulation is defined as voluntary control over attentional, emotional, and behavioral impulses in service of values and standards that are important to us (Duckworth & Carlson, 2013). According to Hofmann, Schmeichel, and Baddeley (2012), the three main components of self-regulation are 1) having and monitoring thoughts, feelings and behavioral standards, 2) possessing enough motivation to decrease the gap between our standards and what we actually do, and 3) having sufficient capacity to close the gap despite obstacles and temptations. Impulsivity, which can lead to behavioral problems in the classroom, stems from a self-

regulation deficit (Duckworth & Carlson, 2013). Deficits in self-regulation may stem from a lack of monitoring, motivation or capacity (Hofmann, Schmeichel, & Baddeley, 2012).

Deficits in self-regulation may be caused by temporary reductions in executive functioning skills due to situational factors like stereotype threat, interracial interactions, stressors (environmental or social), ego depletion (as the day goes on we use up our self-control and become depleted), or a heavy cognitive load (we need to process more information than our working memory can handle) (Hofmann, Schmeichel, & Baddeley, 2012). Ego depletion may be the result of temporary reductions in blood glucose. Providing "fast-acting glucose drinks appears to buffer against" depletion and improve working memory and inhibition tasks (Hofmann, Schmeichel, & Baddeley, 2012, p. 177). The terms "self-regulation" and "executive functioning" are sometimes used interchangeably in the literature. Both executive functioning and self-regulation are crucial for learning, malleable, and can be taught (Blair & Raver, 2015).

Executive functioning skills are critical for learning and school success, they build self-regulation capacity and they can be improved (Hofmann et al., 2012; Diamond, Barnett, Thomas & Munro, 2007). Core executive functioning skills are 1) cognitive inhibitory control (resisting distractions and staying focused), 2) working memory (holding and using information), and 3) cognitive flexibility, or the ability to mentally switch gears (Diamond et al., 2007; Best & Miller, 2010). Executive functioning skills are important at all ages. In preschool, they are strongly associated with school readiness (more than IQ, reading, or math skills), and are predictive of adult criminality, wealth, and health (Duncan, Schmitt, Burke, & McClelland, 2018; White & Carlson, 2016). Poor executive functioning skills are linked to ADHD, teacher burnout, students dropping out, drug use, and crime (Diamond, et al., 2007). For these reasons, self-control can be viewed as a "master virtue" (Baumeister & Exline, 1999, p. 1165).

Like growth mindset and EI, self-regulation is affected by factors outside a child's control. For instance, the risk that children have problems with social competence, emotional intelligence and self-regulation increases if they are exposed to multiple poverty-related risks (Webster-Stratton, Reid, & Stoolmiller, 2008). Boys from low-income homes have a higher risk for self-control problems (Campbell, Shaw, & Gilliom, 2000). Gilliom, Shaw, Beck, Schonberg and Lukon (2002) studied anger management in 3 ½ year old boys from low-income families, finding children who have the mental flexibility to shift their attention away from the thing making them angry and seek information about situational constraints were better at diffusing their anger. They also found securely attached children who witnessed positive maternal control were better at regulating their emotions.

Several interventions have been found to effectively improve executive functioning skills for preschool and early elementary children. In preschool children, the Tools of the Mind curriculum, which includes dramatic play, self-regulatory self-talk, and other activities, improves executive functioning (Diamond, et al., 2007).² In the Tools of the Mind curriculum, activities are designed to 1) be self-correcting³ so kids can identify for themselves when they have a wrong answer, 2) involve reflections on learning, 3) involve student-to-student interactions so they can learn from each other and 4) embed self-regulation into writing scaffolding, which involves planning (Bodrova & Leong, n.d.). White and Carlson (2016) found either dressing up like Batman helps children self-distance (become less self-absorbed) or engaging in third person self-talk improved executive functioning in 5 year olds (but not in 3 year olds).

 $^{^2}$ It is fortunate that Tools of the Mind is already a First Book partner. This relationship is rich for further development of self-regulation resources.

³ For example, dividing 9 beans into 3 equal piles is self-correcting, whereas solving 9 divided by 3 on a math worksheet is not.

Researchers have identified several promising pathways for building self-regulation and executive functioning in adolescents. Intense exercise has been found to improve self-regulation by helping teens inhibit their impulses (Peruyero, Zapata, Pastor, & Cervello, 2017). Flannagan, Allen and Henry (2010) found that in public school children, anger management training combined with Rational Emotive Behavior Therapy (a specialized short-term type of cognitive behavioral therapy that helps people replace self-defeating thoughts and feelings with more productive, healthier beliefs) led to lower rates of aggression and depression and improved social skills.

An emerging area that offers promise for helping children increase their self-regulation is brain-training programs. One particular program, Cogmed Working Memory Training uses computerized working memory tasks of increasing difficulty to help children strengthen this skill. Cogmed has shown anecdotal evidence of improving working memory and attention, although additional empirical studies are needed to confirm these findings (Shinaver, Entwistle, & Söderqvist, 2014).

Another promising curriculum is "I Control," a program designed to help middle school students with significant behavioral problems learn social self-regulation (Smith et al., 2017). A preliminary study by Smith et al. (2017) found 1) teachers reported improved executive functioning and better behavior, and 2) students reported better emotional and behavioral and improved social problem solving from using "I Control". I Control teaches self-regulatory skills. I Control teaches both "hot" (emotional) and "cool" (cognitive) executive functioning skills. Emotional self-regulation is built with self-awareness tools such as "1) inhibiting responses, 2) problem identification and labeling, 3) linking goals with motivation, 4) schema clarification, and, 5) emotion recognition" (Institute of Education Sciences: Funded Research Grants, 2011, p.

1). Cognitive executive functioning skills focus "on self-awareness training" and include the skills of "1) metacognitive monitoring and strategy shifting, 2) error correction, and 3) evaluating progress toward specific goals" (Institute of Education Sciences: Funded Research Grants, 2011, p. 1). While more studies on I Control are needed, these initial results are promising. In sum, teaching self-regulation should be part of curriculums and a core value in school communities.

Self-regulation and goals. Teens often struggle to set and make progress towards goals that require self-discipline. Building teens' self-regulation through mental contrasting and implementation intentions makes goal pursuit more successful (Duckworth, Grant, Loew, Oettingen, & Gollwitzer, 2011). Mental contrasting helps teens set goals. Mental contrasting involves visualizing one's desired future and seeing ways the present reality is an obstacle to that future desire (Duckworth et al, 2011). Implementation intentions help teens pursue goals. Implementation intentions are if-then plans: if situation X occurs, then I will take Y goal-directed behavior. An if-then plan for a student whose goal is passing geometry might be "if it is 7:00 pm on a Monday-Thursday, then I do geometry problems for 30 minutes." Planning ahead primes us so that when the occasion to act arises, goal directed behavior is easier and more automatic (Duckworth et al, 2011). Mental contrasting and implementation intentions build teens' self-discipline, increasing their self-regulation and contributing to successful goal pursuit.

Teacher style and self-regulation. Teacher skills and styles affect students' self-regulation. Children are more aggressive in classrooms where teachers have poor classroom management skills (Webster-Stratton et al., 2008). Training teachers to use positive discipline (giving praise and noticing what students do right) to manage their classrooms, and training teachers in social and emotional intelligence, led to better emotional self-regulation, social

competence and better student behavior (Webster-Stratton et al., 2008).⁴ This was especially true for children who initially scored the lowest. Additionally, when teachers or parents are both highly responsive and highly demanding (referred to in psychology literature as an "authoritative" style), academic outcomes are better (Kiuru et al., 2012; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994; Walker, 2008).

Researchers Sungar and Tekkaya (2006) compared traditional instruction that is centered on the teachers and textbooks with problem-based learning (PBL), where students work through ill-structured problems. PBL creates more independent learners with higher academic learning. As students become more responsible for their own learning, they become more self-regulated learners who value the task more and are better at regulating their efforts. They have improved critical thinking, improved metacognitive self-regulation, higher intrinsic motivation, and higher peer learning. PBL helps builds the skills of setting goals, planning, trying out strategies to achieve the goals, managing resources and managing progress, of all which support executive functioning.

Students with special needs, particularly those with ADHD or executive functioning disorders, may need extra support from teachers as they use PBL. Listening to the teacher, staying on-task, and getting along with classmates and school staff all require self-regulation skills. This investment of teacher support is likely to pay off as PBL builds the skills these students need to cultivate. Most problematic school behaviors (talking back, getting into fights,

⁴ The curriculum studied in this experiment is the "Incredible Years (IY) Teacher Classroom Management and Child Social and Emotion curriculum (Dinosaur School)." The study took place in low-income schools. It seems highly applicable to First Book and we strongly recommend First Book learn more about this program, it may prove to be a fruitful partnership.

failure to do work) stem, at least in part, from a lack of self-control. Curriculum-based interventions help build self-regulations skills in kids of all ages, in racially diverse and low-income students (Pandey et al., 2018).

Self-Regulation Interventions

Getting started (pre-school and early elementary students).

Dress up like Batman. (or other characters that have self-control). Doing so creates distance from the self, which improves self-control and encourages perspective taking (White & Carlson, 2015). We note many classrooms do not have Batman costumes readily available, but they might have fabric or paper that could be improvised into a cape, superhero masks or superhero symbols. Note, this intervention worked in 5-year olds, but not in 3-year olds.

The waiting game. The ability to delay gratification is an essential component of self-regulation (Mischel, 1989). Children who have trouble delaying gratification can be impulsive or disruptive. Educators can teach delayed gratification by having students pause before doings things they want to do, such as eat snack, go outside for recess, or start an art project. Teachers and students can practice counting to 10, taking deep breaths, or singing a song to build their skills of waiting. Teachers can frame this as building your super power or character strength of perseverance.

Getting started (older elementary and middle school).

WOOP it up!: Gabrielle Oettingen, professor at NYU, has developed WOOP, a short process where one visualizes and/or writes about a wish-outcome-obstacle-plan. Imagining and planning how to pursue a goal in the face of obstacles improves self-regulation and goal attainment (Duckworth, Grant, Loew, Oettingen, & Gollwitzer, 2011). Teachers can watch a

video explaining WOOP with their class and do a short guided WOOP practice available for free at http://woopmylife.org/new-page-3.

Getting started (all ages).

Move-it, move-it breaks. Building movement into the curriculum can improve self-regulation (Egger, Benzing, Conzelmann, & Schmidt, 2019). Physical exercise improves cognitive function (Ratey, 2013; Colcombe et al., 2003). Dance improves memory and attention (Teixeira-Machado, Arida & Mari, 2019). One website with short (2-5 minute) movement breaks is gonoodle.com.

Mindfulness Breaks. Mindfulness and breathing practices also build self-regulation. Some specific activities are described in the Super Circle intervention below and in the Problem/Solution Matrix in Appendix J. Cosmic Kids Zen Den offer 5-10 minute mindfulness videos that help children develop awareness of their thoughts so they can make their thoughts work for them instead of against them. One example can be found here:

https://www.youtube.com/watch?v=so8QN9an3t8.

Teacher Style Matters. Special needs students, and all students, are better off when teachers create classroom cultures of realistic-yet-high expectations (appropriate to the learner, taking special needs into account), are responsive to students, and practice positive discipline by "catching" kids behaving well (Kiuru et al., 2012; Steinberg et al., 1994; Walker, 2008). For example, when a teacher notices a distractible student working diligently, she could say "Bob, I notice you are really concentrating on your math worksheet. Way to go! That focus will help you get better at subtraction." Hearing comments like this will motivate Bob more than being told "Pay attention! You are never going to learn subtraction if don't try."

In-the-moment support.

Distract and ask. When a child's temper begins to flare, distracting their attention from the anger trigger can help diffuse the situation. Additionally, getting curious about other situation factors that might be contributing to their anger can also subdue tempers (Campbell, Shaw, & Gilliom, 2000). When a teacher notices a student getting angry, she can distract them from the source of anger and/or ask students questions like "what else is contributing to [the situation]?"

Belly breaths. Children who have developed the skill of deep breathing can draw on their breath as a resource when emotions fly high. A few deep breaths can give a child the space they need to slow down and choose their response, rather than letting anger or frustration automatically guide their behavior. In order for students to be able to tap their breath as a resource, they need to first build this skill when they are calm, which is why daily mindfulness practices like the ones noted above and included in Super Circle are so valuable.

Character Strengths

Character Strengths Overview

Character strengths and virtues promote positive attitudes and outcomes such as well-being and achievement, which enable people of all ages to thrive (Niemiec, Shogren, & Wehmeyer, 2017). Although common use of the word, *character* infers it is something people either have or don't have, people are actually a constellation of positive character strengths, which they express in varying degrees (Niemiec, 2018). Character strengths reveal who we are; and therefore, they form our identities. However, character strengths are also about action.

Adults and children deploy and express their strengths in all parts of their lives (Niemiec, 2018).

Each person has approximately 3-7 signature strengths, which are the character strengths most essential to our core identity that energize us (Niemiec, 2018). Use of signature strengths increases human flourishing. When people align their thoughts and actions with their signature strengths, they increase their authentic well-being (Niemiec, 2018).

A variety of character strengths interventions are now supported by research. One intervention targeting the strengths of hope and perspective is called, *one door closes, another door opens*, in which individuals write about a negative event that led to unexpected positive outcomes (Gander, Proyer, Ruch, & Wyss, 2012). This intervention increased participants' happiness and decreased their depressive symptoms over time (Gander et al., 2012). Another intervention, in which participants used their signature strengths in a new way each day led to increases in happiness and decreases in depression that continued for up to six months (Seligman, Steen, Park, & Peterson, 2005). Even the simple act of thinking of three funny things that happened and writing about it has shown positive outcomes (Gander et al., 2012).

The benefits of character strengths for children with intellectual and developmental disabilities are rich and diverse. Perhaps most importantly, the context of a strengths-based perspective instead of a deficit-based perspective can be empowering and hopeful for children who feel different from their peers (Climie & Mastoras, 2015). The positive emphasis on strengths may also help educators see beyond disruptive behaviors caused by a disability and instead focus on nurturing strengths and celebrating a child's individual successes (Climie, Mastoras, McCrimmon, & Schwean, 2013). With respect to ADHD in particular, the increased risk of comorbidities may be alleviated by early interventions that encourage focusing on strengths (Barkley, 2014).

Additional studies assess the effectiveness of incorporating strengths-based interventions into the school curriculum. One such intervention, Strengths Gym, enabled students aged 12-14 years old to self-identify with their signature strengths. The students then engaged in a variety of strengths-based exercises through in-class activities, open discussions, and homework activities that apply strengths in their lives (Proctor et al., 2011). Those who participated in these exercises had higher life satisfaction than students who did not participate (Proctor et al., 2011). Another intervention, 'other people matter,' was also tested in a school setting with students aged 9-12 years old. This intervention taught students to recognize their own strengths and practice strengths-related goal-setting (Quinlan, Swain, Cameron, & Vella-Brodrick, 2015). In this study, the intervention group scored higher on measures of classroom engagement and class cohesion and they scored lower on class friction than the control group.

Character strengths are also proven to buffer people from depression and anxiety (Huta & Hawley, 2010), predict resilience (Martinez-Marti & Ruch, 2017), and to be positively associated with posttraumatic growth (Peterson, Park, Pole, D'Andrea, & Seligman, 2008). Although all three of these studies were conducted with adult participants, their findings carry meaningful value for children in low-income school districts.

Additional valuable research centers on the tools for measuring character strengths in young people. The VIA Youth Survey of character strengths is a classification and measurement of character strengths for children aged 10-17 (Proctor et al., 2011). Shogren, Wehmeyer, Lang, Niemiec, and Seo (2017) offer support for using the VIA Youth Survey with children who have intellectual or developmental disabilities. Although the authors note that additional work must be done to improve the wording of specific questions for some youth with intellectual

disabilities, the authors found similarities in the reliability of this survey for youth with and without disabilities (Shogren et al., 2017).

Teachers with special needs students in their classroom can generate positive feelings of inclusiveness through the use of character strengths. Character strengths create a common language of identity, which is particularly encouraging for students who have previously been viewed through a deficit lens due to their disability. Use of character strengths has been shown to increase students' positive emotions (Quinlan et al., 2015), life satisfaction, and well-being (Proctor et al., 2011). More broadly, by fostering a culture rooted in virtue, the classroom stands to benefit from positive emotional contagion, which occurs when positive emotions spread within a group (Fowler & Christakis, 2008).

Character Strengths Interventions

Getting started. Teachers can create a culture of strengths in the classroom so that students learn to see themselves and their peers according to each other's strengths. Teachers can then use strengths-based interventions intermittently to increase students' well-being (Mayerson, 2015).

Strengths-based identity. Every child can benefit from knowing their own character strengths. These positive traits promote well-being and enable children to thrive (Niemiec et al., 2017). For children with disabilities, moving from a deficit-based model to a strengths-based identity can enable these students, their parents, and their teachers to notice their unique competencies and ability to contribute positively to the world around them (Buntinx & Schalock, 2010). Students aged 10-17 can use the free VIA Youth Survey to identify their individual strengths in about 15 minutes. See *Appendix B* for a step-by-step guide to incorporating a strengths-based identity for each student within a classroom setting.

Two powerful interventions. Teachers can have students 1) use their strengths in a new way each day; and 2) do the three good things exercise: they write down three things that went well and a brief explanation of why these things occurred. These interventions stand out as highly effective activities for boosting happiness and lowering depression (Seligman et al., 2005). Both of these activities can be introduced at the beginning of the week and at the end of each day, students can write for 15 minutes in their journal about their experiences. On Friday afternoon, students can gather to share their journal entries and talk about their experiences in a group discussion.

Strength for the task. When students, especially students with special needs, are faced with an academic challenge, teachers can coach students to consider which character strength(s) will be most useful in overcoming the challenge. For instance, imagine a student with ADHD needs to research and write a long-term paper. He could use his strength of judgment to consider topics, his strength of perspective to develop a work plan, his strength of kindness to be kind to himself and commit to a schedule that will help him complete the paper on time so he can spend time with friends, or he could use his strength of perseverance to make progress each day.

Best possible self. Students imagine who they want to be in the future and then journal a description of that identity, which is shared with their teacher. This exercise supports goal-setting for students with intellectual and developmental disabilities, which helps them engage in self-regulated problem-solving (Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015). Through this exercise, students gain self-awareness and then imagine how their character strengths can help them achieve their goals (Niemiec et al., 2017).

In-the-moment support. When individual students disrupt classroom activities due to behavioral issues, this is when a culture of character strengths can be particularly beneficial. The

following interventions are designed to shift a child's focus toward something productive, which reinforces a positive view of themselves.

- 1. Draw a superhero based on one of their signature strengths. Alternatively, a student can simply draw the strength of love.
- 2. Engage in an act of kindness by drawing another student's signature strength in the form of a superhero.
- 3. Encourage struggling students to reflect upon their best possible selves and determine what character strength is needed right now to act in accordance with their best selves.

Super Circle Intervention

Many pre-school, kindergarten and elementary school teachers start the day with "circle time," where students are asked to sit in a circle, discuss the calendar, and plan for the day.

Classroom jobs are assigned, and sometimes songs or stories are included. Circle time requires and builds emotional intelligence and self-regulation as students relate to each other, speak one at a time, listen, and stay focused. We recommend leveraging this existing circle time to connect and incorporate key behavioral applications supported by positive psychology theory and research into a new "Super Circle" intervention that encompasses small exercises in growth mindset, character strength, self-regulation, and emotional intelligence. The "Super Circle" is designed to be inclusive of kids with special needs and can be adjusted as appropriate for older children and for the time available. It sets the stage for a day of learning, engagement and growth, and includes the following practices, which are intended to be a menu of activities that a teacher can vary and incorporate as age, time, and classroom needs dictate:

Self-regulation.

Belly breathing. Students begin the day with 5-10 deep belly breaths as a mindfulness exercise. Mindfulness can improve students' ability to pay attention, control themselves and act with care and respect at school. This activity been shown to be especially effective with low-income, ethnic, and minority students (Black & Fernando, 2013). Teachers can use their arms, a computer graphic, or an expandable sphere toy to remind students of slow and deliberate belly expansion and contraction process.

Red Light Purple Light (RLPL). RLPL is a more cognitively challenging variation of the popular children's game "red light green light," adapted for a classroom setting. It has been shown to improve self-regulation in group settings for low income preschool students (Duncan, Schmitt, Burke, & McClelland, 2018; Schmitt, McClelland, Tominey, Acock, 2014). RLPL builds three aspects of executive functioning skills: working memory, attentional shifting, and inhibitory control (Duncan et al., 2018). The teacher holds up various colored circles to alert the students to do a different action. See Appendix H for a detailed description.

Character strengths.

Story. The teacher reads an empowering story, such as one of the books listed in *Appendix I*, and students spot the ways characters use their character strengths to achieve a goal, overcome a problem, or in social interactions.

Strengths star. Each day a different student is the strengths star. The other students spot how the star uses his/her character strengths.

Strength spotting. Students spot character strengths they have seen their peers use recently. The strengths are grounded in real examples. Instead of saying Tina is kind they would say, "Tina was kind when she helped Bobby get up after he fell off the swing."

These strength spotting exercises involve careful observation, labeling, and providing evidence for how the strength was expressed (Niemiec, 2014).

Classroom jobs based on character strengths. The line leader uses the character strength of leadership; the door holder uses the strength of kindness; the snack helper uses the strength of self-regulation (since she helps set snacks up and is the last one to eat snack).

Emotional intelligence.

Emotion-guessing game. A student draws an emotion flashcard from a deck, then pretends to feel and act out the emotion for classmates to guess (Gibbs, 2017). The first person to guess correctly takes the next turn. Before the game, teachers can point to a poster that lists emotions with matching faces. See *Appendix D* for examples.

Growth mindset.

Growth greeting. The teacher greets each child by name and reminds each one that she belongs and is special and unique. The teacher reminds the children that the learning process requires mistakes and honesty, so making mistakes is ok and important - and can even be fun. The teacher is encouraged to prime herself each morning with her own mindfulness practice to reinforce her own growth mindset. Refer to Appendix I for "Mindset Works" free growth mindset resources.

Mindfulness.

Savoring. Offer kids a raisin or other fruit and have them pay attention to the texture, smell, color, consistency, and taste. Have them share how the quality of what we pay attention to changes when we pay full attention to the experience.

Music. Ask kids to lie down and listen to a specific piece of music and pay attention to individual instruments and how the music makes them feel.

Silence and listening. Ask kids to be quiet and listen internally to their own breathing and heart rate - or listen externally to the sounds around them.

Sensing. Have kids face each other in pairs, place their hands in front of them, sense the temperature of each other's hands without touching, and even move their hands in tandem without touching.

Summary. We believe the Super Circle intervention illustrates how these four distinct areas of positive psychology research can be combined to improve the classroom experience for special needs students. All of these strategies also improve the well-being of the entire classroom so that special needs students don't need to be singled out for specialized treatment. Rather than positive psychology interventions being one more thing teachers ought to do, these interventions can be infused into what teachers are already doing. In the Appendices, we offer a variety of additional resources and interventions to support First Book's goals of helping their members thrive, including suggested ways to measure the interventions' effectiveness.

Conclusion

In summary, this project aims to assemble sound, research-based insights from the abundant field of positive psychology to support teachers and students with special needs, even if those children are not diagnosed with a specific disability. First Book's members have asked for advice and guidance for handling behavioral problems in their busy classrooms in a manner that is empowering for the struggling student and for the classroom as a whole. In developing our recommendations, we've tried to put ourselves in the shoes of a teacher who manages a busy classroom and juggles a variety of challenges and constraints. Therefore, the majority of our suggestions are small tweaks to the way a teacher might communicate with a struggling student. These small tweaks do not require extensive planning or preparation and therefore, they can be

woven into existing classroom activities with minimal effort. We believe this approach is both respectful of teachers and of students because it is practical and useful.

In order for teachers to benefit fully from these interventions, we've balanced our small tweaks interventions with more comprehensive approaches that enable teachers to promote positive classroom environments. Consequently, this report contains a thoughtful review of each category of positive psychology in terms of improving classroom outcomes in addition to strategies teachers can use to improve their own knowledge of these tools.

Our work in assembling these interventions is in service of First Book's noble mission to help create educational equity for students in low-income families. We quickly learned that First Book's mission has expanded to include a commitment to developing their own knowledge base of research that can improve classroom and student outcomes. Therefore, we worked collaboratively with our contacts at First Book to ensure that our research complemented their existing knowledge base. As a result, this report focuses on four distinct domains within positive psychology: emotional intelligence, growth mindset, self-regulation, and character strengths. In addition, mindfulness practices are woven throughout our recommendations, and particularly within our self-regulation section because mindfulness acts as an important mediator of these interventions.

Furthermore, in creating this report, we considered the various ways in which First Book's team might utilize this information to develop materials for their members. As a result, we combined our literature review and suggested interventions and categorized them by topic to facilitate the development of specific tools and resources for teachers and students. We also wanted to offer suggestions for how First Book might package these tools for teachers, which led to the development of the Super Circle intervention (p. 33), the Problem-Solution Matrix (p. 66),

and the guide to incorporating Character Strengths in the classroom (p. 55), along with a variety of additional suggestions. Our hope is to empower First Book with positive psychology insights while also enabling them to envision how these insights can bolster teachers' efforts to support struggling students and promote a positive classroom environment.

Last, we would like to convey our deep gratitude to First Book and to express how humbled and honored we have been to work with such an extraordinary, heart-first mission-based organization that is making a difference in the lives of low-income children. We extend our special thanks to our two sponsors and partners from First Book: Julye Williams and Jules Applegate who have been consistently available, responsive, and patient with us along the way. Additionally, we extend a special thanks to our beloved Virginia Millar who has been our humble and ever-so-kind exemplar of teaching and education. Thank you all for the privilege of supporting this important work.

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Appendix A – Measuring Success

Proposed Metrics and Measurement Processes

Although all of the positive psychology principles and most of the interventions recommended in this application plan are grounded in empirical research, the population of children with special needs in low-income schools has not been specifically studied within the domain of positive psychology. Therefore, we propose a thorough and regular measurement process to assess the efficacy of the recommendations and the ensuing offerings (e.g., First Book Special Needs Toolkit, Discussion Guides) in achieving the ultimate desired outcome, as articulated below. We recommend adopting a "test and learn" philosophy throughout to encourage testing of both the content of the toolkit and other resources – and for the measurement approaches themselves. Approaching the measurement process, as well as the content and product development, with an open, flexible and curious attitude will eventually lead to optimal outcomes. The recommended metrics below can be collected using the measurement processes that First Book has in place already, in particular regular First Book member surveys (with robust response rates upwards of 50%), and web statistics.

Success Metrics

Desired outcome - or "What does success look like?"

We propose the following definition of success for this effort: "First Book members (i.e.., teachers or other educators in Title One schools or qualified low-income communities) have the tools and resources they need to help children with special needs - and to manage a classroom which includes special needs kids."

We propose the following 10 Key Indicators of Success, as measured by six measurement tools. For detail, please see the Quick Reference Grid below, followed by definitions for each measurement tool.

10 Key Indicators of Success - Quick Reference Grid

		Measurement Tool					
Metric			PANAS Assessment	SWLS Assessment	Web Statistics	Focus Group	
1. Do teachers feel they have effective tools to help manage a classroom with Special Needs students?							
2. Are Special Needs kids improving in mastery of key concepts and well-being? To what degree?							
3. Is teacher well-being improving? To what degree?							
4. Are teachers locating and using the First Book tools and resources? To what extent?							
5. Do teachers feel the First Book tools and resources help them better teach and help children with special needs?							
6. Do teachers feel the First Book tools and resources help them manage a classroom which includes Special Needs kids?							
7. Are the tools and resources effective at helping classroom management? To what degree?							
8. Are the tools and resources helping children with Special Needs? To what degree?							
9. Are the tools and resources helping all students? To what degree?							
10. Would teachers recommend First Book tools and resources for Special Needs to other schools and colleagues?							

Measurement Tool Detail

Baseline Survey

We recommend adding the following questions to First Book's member survey <u>prior</u> to introducing the Special Needs Toolkit for a baseline comparison, and then adding these questions again at 6 and 12 months, and annually thereafter to measure impact:

- I have effective tools to help me manage a classroom with Special Needs students
- My Special Needs students demonstrate key concepts impacting their behavior and wellbeing, such as self-regulation, growth mindset, emotional intelligence, mindfulness, and using their unique strengths.
- PANAS and SWL assessment questions (See assessment detail below)*

6 and 12 -month survey questions:

We recommend the following questions to be added to First Book's existing member survey six months after launch of the Special Needs toolkit. Leveraging the First Book focus group questions for their Trauma Toolkit, we propose a parallel set of questions for the Special Needs toolkit as outlined below, to be adjusted with learnings from the Trauma Toolkit process and feedback.

- First Book Screener questions (if yes, continue to the second set of questions, if no, suggest they download the toolkit or discussion guides):
 - o Did you download the Special Needs Toolkit or Discussion Guides?
 - o Have you applied at least one strategy that was recommended?
 - Which strategies have you applied?
- If "Yes" to Screener questions:
 - o I feel equipped to support students with special needs
 - o I have the tools I need to deal with behavioral disruptions in the classroom
 - o I consider First Book a trustworthy expert source for helping my students with special needs
 - o I used the Special Needs Toolkit with all of my students, not just with my special needs students.
 - o I found the Special Needs Toolkit to be useful for my entire classroom
 - o I found the tools helpful for my own personal well-being as a teacher
 - o I would recommend the Special Needs Toolkit to colleagues

PANAS and SWLS Assessments

The following positive psychology assessments have been validated and are used to assess adolescent and adult well-being. We recommend using the assessments as part of an initial pilot program to test the effect on general well-being on teachers and students of using the Special Needs tools and resources developed from this work. Longer term, the assessments can be used to "spot check" in random populations or can be incorporated into regular member surveys.

- SWLS (Diener, Emmons, Larsen, & Griffin, 1985).
 - https://www.authentichappiness.sas.upenn.edu/questionnaires/satisfaction-life-scale
 - o For teachers. SWLS (Satisfaction with Life Scale) captures overall subjective well-being. Granted teacher well-being relies on multiple and complex factors but measuring it as part of a larger measurement strategy may add interesting insights. Certainly, some factors contributing to teacher well-being like how they feel about being in the classroom, the control they have, and the impact they are having on their students, may be impacted by tools supplied by First Book.
- PANAS (Thompson, 2007).
 - https://www.authentichappiness.sas.upenn.edu/questionnaires/panas-questionnaire
 - o For teachers. PANAS (Positive and Negative Affect Scale) measures adult positive and negative affect or emotion. Surprisingly, positive and negative affect are not entirely related to each other, so this empirically validated assessment can offer insights into both changes in positive emotion AND (potentially unrelated) changes in negative emotion. First Book's influence on these emotions is minimal in the larger scheme of life but tracking changes over time could offer some

insights into the efficacy of First Book's tools when considered in conjunction with other measurements.

Web Statistics

- e-mail open rate
- # of downloads
- # of repeat orders
- # of click throughs to resources

Focus Group Questions

We suggest the following questions/line of discussion for First Book focus groups (to add to existing focus group discussions or new Special Needs focus groups)

Based on First Book Trauma Toolkit questions (First Book, personal communication, March 12,

2019):

- o Demographic info (include Special Needs, ELL, IEP, ages served, etc.)
- o Have you used First Book resources before? Which ones?
- o How did you hear about the Special Needs toolkit?
- o What made you decide to download this resource?
- o When did you download/ start using what you read in the Special Needs Toolkit (e.g. recently, within the last 6 months, within the last year)
- o Did you ever receive training on how to support kids with Special Needs?
- o Did you implement or use any of the techniques or strategies offered in the Special Needs Toolkit? Which ones? What was/were the result(s)?
- What was the most helpful aspect of the Special Needs Toolkit? Why? How did this tip/insight/information support your work with students?
- What was the least helpful aspect of the Special Needs Toolkit? Why?
- Have you noticed improvement in your student's ability to adapt and learn since you began implementing the recommendations and strategies in the Special Needs Toolkit?
- o If First Book were to publish a 2020 edition of the Special Needs Toolkit, what would you add or change? What information would you like to see included or what questions would you like to see answered?
- o If First Book were to publish a Special Needs Toolkit level 2 what would you like to learn? What problems/issues/questions would you like it to clarify for you?
- o Have you shared the Special Needs Toolkit with others? Why? What was the response?
- o Are there other resources, beyond this Special Needs toolkit that First Book could provide to support your work with kids with special needs?

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Appendix B – Character Strengths in the Classroom

How to Incorporate Individual Strengths-Based Identity in the Classroom

This section explains how teachers can empower students to discover their individual character strengths. Teachers can then incorporate these positive and affirming identities into classroom activities. It's all free of cost and requires minimal time investment for teachers and students.

Step 1: Introduce students to character strengths.

Start by showing students one or more of the resource videos that explain the value of character strengths. The <u>1-Minute Video for Kids by Kids</u> is a great place to start. Next, show students the <u>Character Strengths Fact Sheets</u>, which provides an overview of all 24 strengths and ask them which strengths seem to reflect their own personality. Ask if they've noticed other students displaying any of these strengths. Then, let them know that they'll probably notice strengths a lot more in the near future.

Step 2: Create a Teacher Site on the VIA Character Strengths website.

Time required: about 10-15 minutes. Free of cost.

A Teacher Site is a master account that enables you to administer the VIA Survey to your students aged 10-17. Through this site, you generate unique links for each of your students who then take the VIA Youth Survey. Students will not need to establish their own accounts to take the survey. Also, teachers have access to all of their student profiles in one place.

Step 3: Invite students to complete the VIA-Youth Survey.

Time required: about 15 minutes. Free of cost.

This survey consists of 96 questions and creates personalized reports for each student. Those reports are available to students and can be viewed in the Teacher Site.

Step 4: Create signature strengths cards.

Time required for students to create their own cards: about 20 minutes (depending on the amount of creativity encouraged in this exercise). Students can look at the <u>Character Strengths</u> <u>Fact Sheets</u> for ideas in creatively expressing their signature strengths or they can just use their imagination. A general rule of thumb is that a person's top 3-7 strengths represent their signature strengths (Niemiec, 2018). For the purposes of promoting positive identity in the classroom, signature strengths can be defined as students' top three strengths.

Note: For younger children, use this resource: <u>Kid-Friendly Definitions of Strengths</u>

Step 5: Incorporate individual strengths-based identify into the classroom.

Strengths identity cards can be positioned at students' desks or incorporated into a wall display as long as their names are also on the cards. This way, students learn to appreciate each other according to their strengths.

Step 6: Incorporate a strengths-based approach to soothing disruptive students.

This positive-based approach can encourage a student to widen the scope of their attention, to become more creative and more flexible in their thinking (Catalino & Fredrickson, 2011).

Step 7: Use strengths to inform the IEP process.

Character strengths can be used to develop meaningful IEP goals (Epstein, 2004). This resource can be particularly helpful to incorporate character strengths into IEP goal-setting: <u>Use Strengths to Set IEP Goals</u>. Additionally, the Individuals with Disabilities Education Act of 2004 requires that supports for students aged 16 and over who plan to transition out of school should incorporate the "child's *strengths*, preferences, and interests" (Carter, Brock, & Trainor, 2014).

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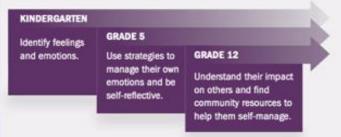
Appendix C – EI Developmental Stages

SOCIAL-EMOTIONAL LEARNING STANDARDS

The importance of social-emotional learning (SEL) has become so essential for student success that states have begun adopting SEL standards, either as free-standing standards (e.g., Illinois, Kansas, Pennsylvania) or with a focus on SEL skills within their current standards (e.g., Washington, Vermont). Developing SEL standards has the potential to impact student learning. For example, research conducted in Alaska by Spier, Osher, Kendziora, and Cai (2009) at American Institutes for Research suggests that including SEL standards increases the likelihood that students will receive instruction in SEL and become better learners.

Illinois has developed SEL standards in accordance with Section 15(a) of Public Act 93-0495. Within the state's three SEL standards, there is a breakdown of the skills and competencies needed to develop the three overarching standards in 10 developmental stages. For example, Figure 1 demonstrates the development progression for Standard 1A, "Identify and manage one's emotions and behavior." In order to master the standard during the K-12 school experience, students need to demonstrate proficiency in specific skills and competencies. To see the developmental progression of all the SEL skills and competencies by grade level, refer to the Illinois State Board of Education SEL Standards (www.isbe.state.il.us/ils/social_emotional/descriptors.htm) (Illinois State Board of Education, n.d.).

Figure 1. Example of Development Progression for One SEL Standard



Note: For simplicity, Figure 1 includes only three of the 10 developmental stages for Standard 1A.

Many other states have standards whose mastery requires students to have SEL skills (Kress et al., 2004). For example, the Grade 9–10 Common Core State Standard for English language arts literacy RL.9-10.3 states, "Analyze how complex characters (e.g., those with multiple conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme" (NGA & CCSSO, 2010a). In order to meet that standard, students need to understand a variety of emotions a character might have, how the character's context influences his or her emotions, and what defines effective interpersonal interactions.

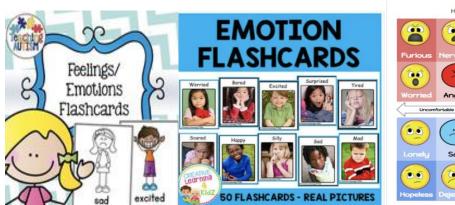
For additional information about SEL standards across the country, see CASEL's State Standards to Advance Social and Emotional Learning (static.squarespace.com/static/513f79f9e4b05ce7b70 e9673/t/52df31e2e4b08544727c3d88/1390359010742/CASEL%20Brief%20on%20State%20 Standards—January%202014.pdf) and the College and Career Readiness and Success Center's issue brief Improving College and Career Readiness by Incorporating Social and Emotional Learning (www.ccrscenter.org/products-resources/improving-college-and-career-readiness-incorporating-social-and-emotional).

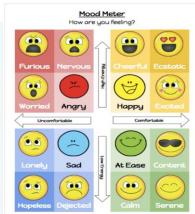
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Appendix D – EI flashcards and poster examples

Real pictures are most helpful for children with special needs A teacher could make a classroom deck of flashcards with the kids





Emotional intelligence poster example

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Appendix E - EI Rhyme example

Use Rhymes and songs to build emotional intelligence

The Feeling Song (to the tune of the *Alphabet Song*)

"I have feelings, what about you?

What are feelings, what do they do?

Some are FADs, and some are JELs

They make you sad, or make you glad

But we know just what to do

Don't let your feelings take over you

Remember to stop and then to think

Blow out the feelings, then take a long blink"

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Appendix F – Pixar's *Inside Out*

Using Pixar's movie, *Inside Out* to teach emotional intelligence

(Note: Language is directly from websites, referenced below)

Inside Out Teaching Guide for All Ages

http://www.projectschoolwellness.com/how-to-use-inside-out-in-your-classroom/



Elementary Grades: Use Inside Out as a tool for teaching the fundamentals of emotional and mental health. For example...

- What are our different emotions?
- What is the purpose of each emotion?
- How do we express emotions we are feeling?
- How can we recognize the emotion someone else is feeling? (body language, actions, words)

Middle School Students: Along with the lower elementary grade teaching points, <u>Inside</u> <u>Out</u> can be used to teach students about...

- Developing healthy coping strategies
- Understanding how core memories shape our personality
- Discussing how and why our personalities evolve and change as we grow up
- Building empathy for others as we have a chance to look into Riley's brain we see that there are powerful reasons why we make the choices we make

Upper Middle School and Beyond: Building upon what has been taught in the previous grades, as students get older <u>Inside Out</u> provides an opportunity to teach kids about...

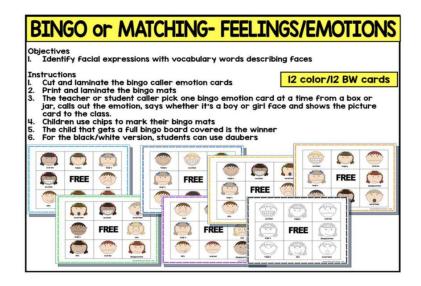
- Mental health and how your mental health impacts each of the other components of your well-being
- Understand how emotions guide us through life

• Connect the value of possessing the language to express emotions as it relates to all areas of life (think: job success, relationship success, academic success)

References

How to use *Inside Out* in your classroom - Project School Wellness. (n.d.). Retrieved from http://www.projectschoolwellness.com/how-to-use-inside-out-in-your-classroom/

Appendix G – Emotions Bingo





References

Feelings and Emotions BINGO. (2019). Retrieved from https://www.teacherspayteachers.com/Product/Feelings-and-Emotions-BINGO-2774055

Appendix H – Red Light Purple Light

(A self-regulation tool)

A Teacher's Guide to Playing Red Light Purple Light (RLPL)

Red Light, Purple Light, is a more challenging version of the popular kids' game Red Light, Green Light. The teacher acts like a stop light, holding up different colored paper circles. Each color cues the students to perform a different action. For instance, yellow might mean clap your hands, green means pat your belly and purple might mean stop. Over time, teachers introduce opposite cues. In this example, yellow would change and mean stop, purple means pat your belly and yellow means touch your shoulders. Playing the game builds the three elements of executive functioning: 1) working memory: students must listen and remember the rules, 2) attentional flexibility: the rules change and students have to switch and follow new rules, and 3) inhibitory control: students must resist the urge to do a different action instead of the correct one. Over time, the activities become more complex and more colors are introduced, so the cognitive complexity continue to increase as skills increase.

References

Duncan, R. J., Schmitt, S. A., Burke, M., & McClelland, M. M. (2018). Combining a kindergarten readiness summer program with a self-regulation intervention improves school readiness. *Early Childhood Research Quarterly* 42(1), 2910300. doi: 10.1016/j.ecresq.2017.10.012

Appendix I – Teacher Resources & Books

Topic-based resources to support teachers and students

Emotional Intelligence

Teacher Resources

Books for Kids

Activities to foster EI
Tools for home and school
Teacher education
Special needs resource for educators
CASEL (social-emotional learning)
PBS: Daniel Tiger's Feelings

The Way I Feel
Understanding Myself: A Kid's Guide to Intense
Emotions and Strong Feelings
My Mixed Emotions: Help Your Kids Handle Their
Feelings
Angry Octopus: Color Me Happy, Color Me Calm
How Are You Feeling Today?
Mean Soup
Ahn's Anger

Growth Mindset

Teacher Resources

Classroom Resources

Khan Academy lesson plans
Mindset Kit for teachers, students &
parents
Interactive programs to build growth
mindset

<u>Classroom worksheets 1</u> <u>Classroom worksheets 2</u>

Videos

Sesame Street Growth Mindset
3-Minute Educational Video
Official TED Talk by Carol Dweck
TEDx The Power of Belief

Books

The Whole Brain Child: 12 Revolutionary Strategies to Nurture Your Child's Developing Mind The Whole-Brain Child Workbook: Practical Exercises, Worksheets and Activities to Nurture Developing Minds

Mindset: The New Psychology of Success

Books for Kids

How They Came to BE

Iggie Peck, Architect

Your Fantastic Elastic Brain: Stretch it, Shape it.
A walk in the Rain with a Brain
Making a Splash: Growth Mindset for Kids
I Knew you could
Thanks for the Feedback, I Think
Everyone can Learn to Ride a Bicycle
Bubble Gum Brain
Sometimes you Win-Sometimes You Learn - for Kids
Rosie Revere Engineer
Mistakes That Worked: 40 Familiar Inventions &

Self-Regulation

Teacher Resources

Books for Kids

WOOP, positive goal-setting Tools-of-the-Mind-Curriculum.pdf

Cosmic Kids Zen Den videos

The Owl and the Guard Dog
Thought Bubbles
Mini the Puppy
The Listening Game
Why are Some People Mean?

What do you do with a problem? What do you do with an idea? Rebel Girls Energy Bus Have You Filled a Bucket? Ladybug Girl

Character Strengths

Teacher Resources

Identifying Character Strengths

Free VIA Youth Survey
Supplemental guide for the VIA

Teaching Character Strengths

Playbooks to Develop Character in Classrooms
Kid-friendly definitions of strengths
Character strengths fact sheets
Spanish-Language Character Strengths
Curriculum
Images for classroom decoration

Classroom Activities

10 Games to learn about strengths
Strength Clusters Mat
Best Possible Self Exercise

Videos & Books

Videos 1-Minute Video for Kids by Kids

9-Min Video for Teachers about Implementing

Strengths into Curriculum

9-Min Video for Teachers about Implementing

Strengths into Reading Activities

18-Min Video for Teachers about Character

Strengths & Newark Boys Chorus

http://www.letitripple.org/films/science-of-

character/

Books for kids

What's Right with this Picture? Teaching Kids Character Strengths Through Stories True You: Authentic Strengths for Kids

Misc.

Use strengths to set IEP goals

Measuring Student Well-Being

EPOCH, Measuring adolescent well-being (Kern, Benson, Steinberg, & Steinberg, 2016) Meassures adolescent well-being across five positive psychological characteristics: Engagement, Perseverance, Optimism, Connectedness, and Happiness.

References

Kern, M. L., Benson, L., Steinberg, E. A., & Steinberg, L. (2016). The EPOCH measure on adolescent well-being. *Psychological Assessment*, 28(5), 586-597. doi:http://proxy.library.upenn.edu:2155/10.1037/pas0000201

Appendix J - "In the Moment" Quick Reference Guide

Problem/Solution Matrix

A tool for teachers to print out, laminate and keep on desk for easy access

	Growth Mindset (Pages 15-20)	Character Strengths (Pages 28-32)	Self- Regulation (Pages 20-28)	Emotional Intelligence (Pages 11-15)	Mindfulness Pages (14, 27, 28, 34-36)
Anxiety	Praise effort, commitment & progress Scaffold assignments Personality Malleability	Choose a Character Strength to help support calming down (e.g., perspective, hope)	Use mindfulness to self-regulate	FADs vs. JELs Name the emotion Dig for emotional roots – ask how a child is feeling or have them point at a picture.	Belly Breaths Mindfulness breaks-The Waiting Game
Aggression or Disruptive	Personality Malleability	Best possible self-reflection Draw strength super hero	Distract and Ask Waiting game Teacher Style Matters (positive discipline and authoritative teaching)	FADs vs. JELs Emotional journal Draw picture of how they are feeling	Count 10 breaths to make time for impulse control. Take a walk to calm down
Lack of Focus	Scaffold assignments Goal Setting (SMART) Teach brain malleability Thinking out loud	Strength for the Task	Move-it, move-it breaks Problem based learning	Dig for emotional roots – ask how a child is feeling or have them point at a picture.	Mindfulness breaks- (Waiting Game) Focus attention exercises (on an object, tree, breath, body, etc.)
Giving up	Power of yet Teach brain malleability Scaffold assignments Goal Setting (SMART) Thinking out loud	Best possible self- reflection Draw strength super hero	WOOP it up Problem based learning	Dig for emotional roots – ask how a child is feeling or have them point at a picture.	Shift focus to achieving a goal instead of an object. (WOOP) Mindfulness breaks- (Waiting Game)