

# Compositive

## *Educating the Whole Child*



**Terese J. Lund, PhD and Alan Gottlieb**

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# **Introduction**

## **What is Compositive?**

It is many things. It is a labor of love. It is my vision of the education every child deserves, a vision that has been honed and refined by some of the best educational minds in our nation. It is a nascent parent movement. And it is soon to form the foundation of a new, break-the-mold school.

## **How did Compositive come to be?**

Education held a primary position in my family of origin, as well in my husband Terry's family. We were each fortunate enough to benefit from a world-class education, and we were

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determined to provide our children with that same gift. As parents, we had the resources to seek out and provide our three children with the best education available.

At the same time, we wanted to devote some of our resources to ensuring that less privileged children also gained access to top-flight schooling. Starting with the Seeds of Hope program of the Catholic Archdiocese of Denver at a K-8 Parochial School, and then later through our Considine Scholars Foundation, we provided scholarships to 77 students. After Annunciation, the students attended Denver's Catholic and other high schools and colleges, all supported by our Foundation.

We got to know many of those children well and took an active role in their education. As we were drawn into their lives, I came to realize that despite the vast gaps between their experiences and those of our children, the challenges they encountered on the road to becoming adults were remarkably similar to those of our children.

I learned that it doesn't matter as much as I thought whether a child comes from privilege and has every opportunity available to him, or comes from desperate poverty and struggles to gain opportunities. The developmental challenges both children face are strikingly similar.

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Just like our own three children, the children we sponsored needed to learn to reflect and learn, recognize and act, care and connect, and engage and serve. They also need to be able to think critically and solve problems, develop both moral and performance character, understand their own health and well-being, and participate in community service and civil society. I am convinced that developing these skills will help every child become an engaged and productive citizen and will give them the best possible opportunity to lead a life of personal excellence.

And as I reflected on this simple truth, that all children needed and deserve this kind of education, I realized that few of our schools provide it. A true education engages a child's brain, body, heart and spirit. And these domains of human existence cannot be engaged in isolation. A true education engages them simultaneously.

That, in a nutshell, is what Compositive embodies. A whole education, in the truest sense.

What I've described above in a few sentences took many years and many sharp, creative minds to develop. I took my broad vision of a whole education and laid it at the feet of brilliant thinkers like Marvin Berkowitz of the University of Missouri, St. Louis, Michael Murray of the John Templeton Foundation,

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Peter Levine of Tufts University, Norma Hafenstein of the University of Denver, Belle Liang of Boston College, Scott Hamilton, formerly of the KIPP Foundation and the Doris & Donald Fisher Fund, and Linda Childears of The Daniels Fund.

Through these advisers I was connected to others who have been instrumental in the development of Compositive.

Terese Lund, who co-authored this book, is an assistant professor of psychology at Wingate University in North Carolina. Over the course of three years, Terese undertook a peer-reviewed literature review that established the academic underpinnings of the Compositive model.

And Amy Slothower, whose diverse resume includes founding charter schools and a principal preparation program for charters, has been invaluable in building the Compositive organization and coordinating the development of its various components.

Over the course of the coming years, Compositive will launch an independent preschool through 5th grade school in metro Denver. The Compositive school will embody the model we've been developing. It is scheduled to open in the fall of 2019.

Compositive is on the cutting edge of a growing movement to fundamentally change how education is perceived and delivered. As we enter a future where automation and artificial intel-

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ligence play increasing roles in the world of work, schools must prepare curious, committed, engaged students to tackle new and evolving challenges.

I hope this book will give you a clear idea of how Compositive will play a role in driving the needed changes.

-- Betsy Callaway Considine

June 2018

# Chapter 1

## Overview

Two five-year-old boys become fascinated by how water is piped into and out of homes. Under adult supervision, they visit a Habitat for Humanity house under construction, and a plumber walks them through the installation of pipes. They pepper him with questions throughout the hour-long visit. Their eyes sparkle as they trace the intricate connections usually hidden behind drywall. After they've learned about the pipes, they start asking about Habitat. What does it do? Why? Who gets the houses? Are they free?

When they get back to school, what has stuck with them, and

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what they talk about, is the idea of people volunteering to build homes for families in need. They ask if their school can volunteer at a Habitat building site.

At an all-girls school in Denver, students discuss environmental science, ecosystems, and human sources of pollution, all while picking up trash along the Cherry Creek bike trail near downtown. They're learning academic content and serving the larger community while in motion, rather than sitting all day at desks. The premise is simple: engaging the body primes the brain to learn.

At a school tucked into the hills above Malibu, California, a ninth-grade boy develops a passion for cooking. He interns under a master chef at a two-star Michelin restaurant in Beverly Hills. For a culminating project that semester, he prepares a 10-course meal for friends and family. Dishes include lobster medallions in a grapefruit ceviche, a Gorgonzola mousse, and poached pears. A week later, he repeats the dinner, with a course or two omitted, at a local homeless shelter.

What do these three examples have in common? A few things. First, they do not look like school as most of us typically envision it.

Second, the students in these three schools are deeply immersed in their learning, and passionate about it.



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Third, these students are internalizing the basic truths at the heart of deep education: to grow as a human being, you must constantly reflect and learn, recognize and act, care and connect, and engage and serve.

Schools and parents who help children develop those four pairs of capacities do so by simultaneously engaging their minds, hearts, bodies, and sense of belonging to a larger community. The end result of such an education is adults who have a strong sense of purpose, and who contribute in meaningful ways to the societies in which they live.

That, in a nutshell, is what Compositive embodies. We believe in what we call Whole Education. And in this brief book, we are going to help you understand what that means, how it looks in action, and how you can bring the Compositive way into your home, your school, and your community.

## ***Whole Education takes place everywhere, and at all times.***

We believe that Whole Education takes place everywhere, and at all times. It can happen in a classroom. It can happen on the walk or bus to and from school. It can happen in the backyard, at the dinner table, on a car trip. It can happen at a wedding, at a

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baseball game, or almost anywhere you could imagine.

And you'll know you've done it right if the children in your charge have developed the four capacities we listed above.

In this chapter, we will touch briefly on those capacities, as well as the four domains of Cognition, Character, Health & Wellbeing, and Community Engagement, to show how Compositive takes the "beautiful mess" created by the interconnections of domains and capacities to create the education every child needs and deserves: an education that takes place inside and outside the walls of school and home.

Subsequent chapters will delve more deeply into each of the capacities and domains, and how interactions among them create the Compositive magic.

## The Capacities

### *Reflect and Learn*

To Reflect and Learn is **to make meaning of experience to inform understanding and guide further thinking**. It's a cyclical process that alternates the outwardly passive act of reflecting upon something, ruminating, with the active process of learning. Reflection prompts learning, and learning prompts reflection, in an ongoing spiral of discovery. It's future-oriented and sets the path for future discovery.

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Reflecting is taking something one has learned and making meaning of it for your life and out in the larger world.

A child who is in the process of reflecting and learning never stops asking questions. She delves deeply into subjects and issues that engage her. Though the constant litany of “why?” questions may strain parents’ patience, this behavior is well worth encouraging. Other question types are an integral part of reflection as well: “what” questions, “so what” questions, and “now what?” questions.



### ***Recognize and Act***

To Recognize and Act is **to observe patterns, opportunities, and challenges, and apply knowledge to solve problems and promote growth.** Recognition can be both an internally- and externally-focused exercise. A child learns to recognize her emotions, how she reacts to certain kinds of events or circumstances. She also recognizes the feelings of those around her, and her impact on them. Recognizing and acting also occurs in the cognitive and physical activity realms.

A child who recognizes and acts can value similarities and differences between himself and others, and can celebrate those differences. He is likely to have a diverse circle of friends and to feel at home with people from varied backgrounds.

### ***Care and Connect***

To Care and Connect is **to embody compassion and generosity towards one's self and others, and to cultivate development of authentic, positive relationships.** Caring for oneself is a critical first step in caring for others. In other words, people who are cared for learn to care.

While connecting with others can manifest itself in positive and negative ways, positive connection means forging relationships with individuals, groups or communities that provide

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comfort, wellbeing, and empowerment.

A child who has developed the capacity to care and connect is likely to include others in activities rather than forming exclusive groups. She may also be someone who defends children that are targets of teasing or derision.

### *Engage and Serve*

To Engage and Serve is **to interact with people, ideas, and materials to understand and act on the needs of others and to contribute to society.** There is a sense of relevance, or timeliness, to engaging and serving. It's participating alone or with others in service to the larger community.

A child who can engage and serve will exhibit a natural joy in life, and in participation with others in meaningful activity. He may, without prompting, offer to shovel an elderly neighbor's sidewalk after a snowstorm.

These four pairs of capacities do not operate in isolation from one another, nor are they purely sequential. While we believe they are hierarchical—engaging and serving is the most evolved, altruistic of the four—they reinforce one another in an ongoing cycle. How could one possibly engage and serve without having reflected and learned, recognized and acted, and cared and connected?

## The Domains

When we at Compositive reviewed research on how children learn deeply and authentically, we concluded that learning is not an exclusively intellectual process. Quite the contrary. For a child to learn, her mind, heart, and body must be engaged, and this must occur within a context that ties her to a larger community, outside of not only herself but the immediate confines of a classroom.

**For a child to learn, her mind,  
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engaged... within a context  
that ties her to a larger  
community.**

At least as important as engaging these different aspects of a child's being is the need to engage them simultaneously rather than in isolation. Historically, education has focused on the mind almost to the exclusion of the heart and body. Or perhaps it's better to say that the bulk of the day was dedicated to developing the mind, with breaks interspersed to exercise the body and promote healthy socialization and awareness of the larger world.

We believe that children learn most deeply when their minds,

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hearts, and bodies are engaged simultaneously, and when that engagement is focused on how they live in the larger world.

Chapter 3 will delve deeply into the domains. But as a quick preview, here's how we define each of the four.

### *Cognition*

Educating the whole child means engaging the mind in profound ways that traditional schooling too often neglects.

We at Compositive call this Cognition. A common definition of cognition is "...the processes whereby individuals acquire knowledge from the environment."<sup>1</sup>

We divide cognition into two broad areas: cognitive **processes** (for example problem-solving, critical thinking, and executive functioning) and cognitive **capacities** (e.g. artistic and musical; verbal/linguistic/literacy; visual-spatial; and logical-mathematical). Among other things, a Compositive education places the arts and music front and center, rather than shoving it aside in favor of test preparation or rote learning.

There's a lot more to it than that, as you'll see in Chapter 3.

### *Character*

Many schools promote character education as a centerpiece of their culture. Too often, however, character education

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<sup>1</sup> Sparrow, S.S., & Davis, S.M. (2000). Recent advances in the assessment of intelligence and cognition. *Journal of Child Psychology & Psychiatry*, 41(1), 117-131.

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turns out to be a prepackaged curriculum that has little depth or substance.

Character education, as we define it, falls into two general categories: development of **moral** character and **performance** character.

Moral character provides the foundation for successful interpersonal relationships and ethical behavior. These qualities include humility, spirituality, authenticity and integrity, and a range of social and emotional abilities.

Performance character defines qualities an individual needs to realize his or her potential in academics, extra-curricular activities, the workplace, and other areas of endeavor. These qualities include self-control, creativity and curiosity, motivation, mindset and purpose, and resilience.

## *Health & Wellbeing*

A Health & Wellbeing education nurtures wellness behaviors that promote lifelong physical and mental health. But it goes a step further, as it encompasses more than just physical wellness. Health & Wellbeing education also helps children internalize the life skills needed to be a productive and functioning member of society.

At Compositive, we divide a Health & Wellbeing education into two broad areas: **healthy behaviors** and **life skills**.



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Healthy behaviors include forging and maintaining healthy relationships, monitoring physical health, avoiding risky behaviors, and attending to mental health.

Life skills include daily living and self-care skills, responsibility and accountability, vocational skills, and financial literacy.

### *Community Engagement*

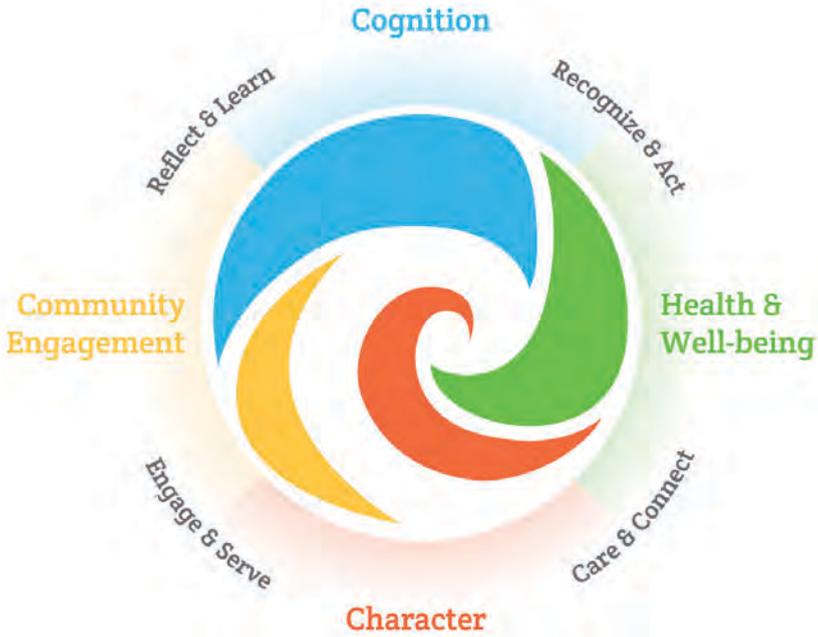
A Whole Education that prepares the mind, heart, and body holds little ultimate meaning if it does not also prepare a child to use that education to engage productively in the larger world. A “wholly educated” child will remain unfulfilled in adulthood unless she has ample opportunities to offer her skills and wisdom to the world.

An education that stresses Community Engagement focuses on two broad areas of engagement: **engagement experiences** and **tools for engagement**.

Engagement experiences include conventional civic engagement (like voting and volunteering), unconventional civic engagement (like participating in boycotts, or conversely, procotts (buying products from companies whose values you support), service, and service-learning.

Tools for engagement allow people to engage effectively. They range from civic skills and knowledge to interpersonal competencies like leadership, teamwork, and cooperation.

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As you read on, please keep in mind that a Whole Education as we define it does not view the mind, heart, and body as elements of a person that can be educated in isolation. Rather, they must be engaged simultaneously in interconnected ways that allow learners to become wholly engaged in the world around them.

Admittedly, the multifaceted nature of the capacities and domains is a lot to absorb. In the following pages, we will lay out these concepts in more detail, and provide some real-life examples to illustrate the key points.

Think back to one of the brief illustrations that opened this chapter. Those young boys who visited the construction site to

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learn about plumbing, and came away even more interested in Habitat for Humanity's mission. They engaged in learning and reflection, and were inspired by volunteers' compassion, prompted by the volunteers' ability to care and connect, and the boys wanted to be a part of that—which led them directly to engage and serve.

Their visit to the Habitat site engaged their minds, and clearly called to their hearts as well. Being little boys, they might not have stayed focused for the full 90 minutes had they not been moving about the entire time. The learning was that much richer because it took place outside the classroom, far away from desks, sitting still, and staying quiet.

And, of course, all of this led them to seek a connection to a larger community doing important work.

There you have it. That's one small example of a Compositive-style Whole Education. Read on for more.

## Chapter 2

### The Capacities

Education is a field strewn with jargon, and in this short book we are going to do our best to avoid using terms that might be confusing to the casual reader. The goal of Whole Education is, ideally, to help produce mentally and physically healthy adults who can think critically, make connections among complex topics and ideas, and contribute in productive ways to the society in which they live.

Envisioning that end result is the easy part. How we get there is where things get complicated, and even messy.

That's why we frame our work through the four pairs of Compositive Capacities. Fulfilled, contributing citizens know

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how to Reflect & Learn, Recognize & Act, Care & Connect, and Engage & Serve in a self-perpetuating cycle of learning and being. In this chapter we're going to delve a bit deeper into each of these capacities.

As you'll see, there is some degree of overlap among the four capacities. We believe that's a strength of the Compositive model. It's a fluid, organic whole rather than a cut-and-dried formula that might seem neat and tidy, but is in fact lifeless.



## Reflect & Learn

To Reflect & Learn is to make meaning of experience to inform understanding and guide further thinking. It's a cyclical process.

At the Anansi Charter School near Taos, N.M., administrators and teachers place great emphasis on helping students understand how their emotional state at any given moment affects their ability to focus and learn.

The school employs a wide variety of tools to create its unique approach to social-emotional learning. One of them is a program called Six Seconds.<sup>1</sup> The program teaches children to pause for six seconds to process before engaging, especially in emotionally fraught situations.

Here's one exercise the school uses to teach kids why this is important. Student are handed a small, travel-sized tube of toothpaste. They're told to squeeze as much toothpaste out of the tube as fast as possible. Then they're given a toothpick and told to use it to put the paste back in the tube. After a couple of minutes, the message becomes clear.

"The lesson is that when you're angry or upset, the words can flow out of you like that toothpaste, with very little effort," school head and founder Michele Hunt explained. "But once

1 <http://www.6seconds.org>

they're out there, they aren't so easy to put back.”

This exercise provides an excellent example of reflecting and learning, or in this case, learning and reflecting. A child quickly learns that it's a lot harder to get toothpaste back in a tube than to squeeze it out. Reflecting on the experience of trying to push toothpaste back in with a toothpick, what does the student learn, specifically in the context of dealing with outbursts of emotion? What immediate lesson can the child internalize from that experience? Upon reflection, are there more universal lessons that become evident?

***Reflecting and learning are mutually reinforcing, complementary processes.***

As the Anansi example illustrates, reflecting and learning are mutually reinforcing, complementary processes. They also exist in a chicken-or-egg relationship to one another: it's not clear that reflection always precedes learning, or vice-versa. Ideally reflecting and learning go on continually, learning prompting reflection and reflection prompting further learning.

John Dewey, the progressive education philosopher, believed that reflection is a “meaning-making process” and a rigorous way of thinking that mirrors scientific thinking. In addition, reflec-

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tion has an emotional/attitudinal aspect. To be reflective, one must be engaged and open-minded.

Reflection promotes a deeper level of learning. It's the meaning-making process that emerges from learning. Simply learning facts is important, to be sure, but it's only when that learning is

reflected upon, and connected to other learning, that it can take on deeper meaning.

Parents can grow exasperated when their children ask an endless series of "why?" questions. But look at it this way: all of those 'whys' are your child's effort to acquire more grist for the mind's mill: information upon which to reflect, and from which to extract meaning. Reflection, in turn, should spur further action. Reflection is not the end, but rather part of the process of learning, and it propels children to further explore their worlds.

A child who feels free to reflect and learn, and ask many questions is demonstrating an open-minded intellectual curiosity. It may be exhausting to parents, but reinforcing this

behavior is a real brain-builder, especially if the child uses new-found knowledge in new tasks or activities. As is age-appropriate, let your children dive deep into topics they're fascinated by. Encourage and nurture their curiosity.

### ***Reflect & Learn: At-Home Activity***

You might want to try this simple activity with your child, and it's one that can be repeated frequently. During the ride home from school, or at the dinner table, try asking this question: "What mattered to you at school today?" "Why did it matter?" "How will you keep pursuing this?"

Note the crucial difference between this question and the more common (and mundane) question, "What did you learn at school today?" Asking what mattered prompts reflection on learning. It requires your child not just to blurt out a rote recitation of events or facts, but to ponder the significance of what occurred in school.

It's not always easy to get a child to talk about what happened at school. But asking open-ended questions that go deep and require reflection help your child attach meaning and context to the day's events and learning.

To delve into the research behind the Reflect & Learn capacity and its connections to the four Compositive domains, please turn to Appendix II at the back of this book.

## Recognize and Act

To Recognize and Act is to observe patterns, challenges, and opportunities, then apply knowledge to solve problems and promote growth.

Anastasis Academy is a 56-student, private K-8 Christian school in Denver's south suburbs that has achieved worldwide recognition in the six years since its founding, but remains virtually unknown in its own community.

In many ways, Anastasis embodies the Compositive model with its highly personalized approach to learning, its focus on the heart and body as well as the mind, and in its deep connections to nearby social service agencies.

Students have ample opportunities to Recognize and Act, beginning the first week of the school year and continuing through the last day before summer vacation. Before classes start for the year, Anastasis conducts what it calls "Detox Week."

According to Anastasis co-founder Kelly Tenkely, Detox Week helps kids rediscover who they are at their core. All kids carry labels about themselves they need to shed, Tenkely said, and that's the aim of Detox Week. The goal is to keep kids from identifying with those labels – I'm bad at math, I'm ADHD.



Here is how Tenkely described Detox Week in a blog post:

*Our detox week is a time for students to remember that they matter. It is an opportunity for them to reframe the way they think about learning. It is a time for them to share their passions with each other. It is a chance to realize that working together is more productive than competing in learning. It is a safe time to explore creativity and individuality. It is also the week that new students start to discover that the relationship with their teacher is different here; that the goal of coming to school isn't an "A" at the end of the semester, but real learning and growth.*

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In Compositive terms, Detox Week is a time for students to recognize patterns of thought and behavior that may be holding them back, and how to turn those challenges into opportunities. Then, during the final day of Detox Week, students participate in Identity Day, during which each student brings something that says who they are on a deep level, that isn't immediately apparent to others. Tenkely described it as a "huge, science fair-like exhibition."

Here's what she wrote about it on her blog:

*As a school, we take a moment to see the world from another point of view. It is a spectacular day of honoring each child for who they were created to be and celebrating each other's gifts.*

As Detox Week concludes, and students and staff share what they've learned during Identity Day—and a tight community has formed, one in which each member can act to help all others remain true to their best selves.

It's hard to find a better example of recognizing and acting in action.

Just as the capacity to Reflect & Learn is cyclical, the capacity to Recognize & Act occurs simultaneously internally and externally. In other words, developing this capacity carries both personal and social implications.

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When a child has developed this capacity, she will be able to identify and name not only her feelings and emotions at any given moment, but those of her classmates as well. Recognizing and acknowledging feelings in oneself and others leads to effective self-regulation strategies, and develops the key “soft skill” of empathy.

You might explain the capacity to Recognize & Act to your child this way:

It’s noticing what’s happening inside you and around you and making choices that help you feel better, learn from those feelings, and, most importantly, help others. An example would be observing that a friend is upset about something, and finding a helpful, constructive, active way to sympathize.

Helping your child develop this capacity is an ongoing process. Encourage them to become careful observers of their physical and emotional environments. How is he feeling at any given moment? How is a particular classmate feeling? What has your child observed in that classmate that leads him to this conclusion? Is there anything your child can do to help that classmate feel better, or to share in her happiness? How can you help your child develop the self-confidence to believe that she can intervene—act—in an effective manner under a variety of circumstances?



### ***Recognize & Act: An At-Home Activity***

As parents we want to observe behaviors, both positive and negative, and name them in a non-judgmental way, either to reinforce the behavior or correct it. We also want our children to be able to observe behaviors, as well as objects, people, and nature in the world around them. This activity from [smartparenting.com](https://www.smartparenting.com) helps develop all of these skills, in parents as well as children.

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Describe an object to your family without naming it, and have them draw it, trying to get as close to the original object as possible. Because they don't know what they are drawing, the tricky part becomes in making sure you're giving sufficiently detailed descriptions.

Here's what you need to remember about this activity. First, be specific. Instead of saying, "draw a red circle," say, "draw a red circle that is about the size of a nickel. Fill in the red circle completely."

Second, break down complex instructions into small pieces, and don't try to give all the instructions at once. "Now, I need you to draw another red circle around the circle leaving about a finger width's space between that circle you are drawing and the circle you've already drawn."

Third, it's probably not going to go as smoothly as you expect. Don't sweat it. There's a good chance that the finished drawings will not look like what you describe. That's ok. This exercise is to help you get in the habit of observing and describing, which will show you the where you need to improve when it comes to describing behavior.

Details about the research behind the Recognize & Act capacity, and its connection to the four domains, can be found in Appendix II.

## Care and Connect

To Care and Connect is to embody compassion and generosity towards one's self and others to cultivate development of authentic, positive relationships.

Bricolage Academy charter school in New Orleans is a much sought-after, increasingly diverse charter school that stands out in a city full of strong charter schools. Why? The school's focus on caring and connecting is a big part of it. Here's an example we observed.

On a rainy spring morning, all 16 of the African American girls who attend Bricolage Academy, grades K-3, filed into a classroom for a graduation ceremony.

They sat in two rows, facing their mothers or female guardians, who sat backs to the blackboard.

The girls had been spending lunch and recess periods in the classroom with African American women, learning what it means to be a "Queen," a proud, upstanding, "beautiful girl of color."

Each girl stood and read a short letter about what she had learned from the class, and how it had changed her.

"I learned not to be a bystander but to be an upstander," one girl said.



“People may be mean to me because I am a person of color, but I will not let it bother me,” another said.

At Bricolage, such moments are the norm. From Founder Josh Densen to the entire staff, no one shies away from honest talk about race, privilege, and inequity. Kids who attend Bricolage will not graduate believing the world is colorblind.

Rather, they’ll see the world as a wonderfully diverse place, but one in which diversity is not universally celebrated or appreciated.

“We aspire to anti-racist, inclusive, equitable practices at all levels – parents, staff, students,” said Densen, who openly describes himself as an upper-middle-class white man.

“We don’t see diversity as an end in itself because that

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perpetuates a racist power structure that favors white people,” he said. True diversity promotes equity in the truest sense, Densen said. This means the norm isn’t kids behaving like nice little middle-class white kids. It means celebrating diversity as it truly exists.

Diversity amplifies empathy, Densen said, and empathy is one of the traits Bricolage aims to develop in its students.

And there’s more than one reason to promote empathy. Not only does it make people more compassionate and tolerant, it also will serve them well in the rapidly changing world of work, where people will increasingly need to work in teams with people from all races and backgrounds.

Densen works hard to market Bricolage to families of color. White families already flock top the school: it’s one of the few public schools in New Orleans that has “buzz” among white families because of its strong academics and integrated student body.

When talking to families, Densen said, “I sell equity, empathy, and innovation. I don’t say ‘come here because we are so diverse.’ I say come because we are doing all these great things, and we can only do them because we are so diverse.”

Every child at Bricolage has a personalized learning plan, and one component of the plan is social-emotional learning goals.

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Echoing one of the girls in the graduation ceremony, Densen said a Bricolage student should come to understand that life is “you as a protagonist, not a bystander.”

As you can see from the Bricolage story, caring and connecting is about more than focusing outward, and bestowing your love, compassion and empathy upon others.

It begins with the self. And while understanding how to love and serve yourself is not a necessary precondition to caring for and connecting to others, it makes turning that focus outward easier and more comfortable.

### ***Care for your kids so they learn to care for themselves, and for others.***

This means that effective parenting is a key component in helping a child develop the capacity to Care and Connect. Children who are cared for learn to care for themselves and others. For a child to care for someone else she must first recognize the other as other, with unique needs. To care makes connection, and healthy relationships, possible.

Put succinctly: care for your kids so they learn to care for themselves, and for others.

While caring has its origins deep inside an individual,

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connecting flows outward. In its most positive form, connecting means forging relationships with communities, groups, or other individuals. These relationships provide mutual comfort, a sense of well-being, and empowerment.

The capacity to connect defines our relationships with people and contexts that foster happiness and social-emotional well-being. Connecting is the forging of healthy relationships, which are authentic and reciprocal.

Almost any parent understands how caring and connection works together a gut level: having a positive relationship between you and your child is best way to get her to care for someone else. And that leads to healthy connections—relationships—as she grows older and more independent. Relationships are cumulative—caring begets caring.

That, of course, is what we all wish for our children, perhaps beyond anything else. If they transition into healthy relationships outside their family of origin, we find it easier to let go as they enter adulthood.

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Relationships with teachers are critical as well. All learning is relational. When kids, especially in the younger grades, feel disconnected from their teacher, they disconnect from school as well.

A culture of strong relationships within a school or classroom has to be set in the first days of every school year. All adults need to validate students for who they are as people. If students or adults violate community norms there must be proportional consequences. Adults and children alike must consistently model care and concern for others.

A school that embodies caring and connecting is high touch and low-tech. This might cut against the grain of current education faddism, but in our view, the best learning takes place in-person and offline. The strongest schools we've visited limit screen time. That's not say technology has no place in the classroom. When implemented properly, it is a useful tool. But that's all it is: a tool.

## ***Care & Connect: An At-Home Activity***

You can undertake this activity with one child or multiple children, either siblings or friends. Write a selection of questions on a large ball (a beach ball and an erasable marker work best).<sup>2</sup>

Roll the ball to a family member or friend. Have them answer the question under their thumb. If it feels natural to go beyond a simple answer to the question and into conversation, do so. But play it by ear—sometimes just a quick answer is enough.

You'll find details about the research behind the capacity and its connection to the four Compositive domains in Appendix II.

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2 You can download a series of questions to use with young children at: <http://www.smarterparenting.com/EffectiveCommunicationBallStartersChild.pdf> Questions include: If you could spend the day with anyone, who would it be? Are you afraid of heights? What is the hardest/bravest thing you've done? Questions for teens are available at: <http://www.smarterparenting.com/EffectiveCommunicationBallStartersTeen.pdf> and include: What accomplishment are you most proud of? What are you afraid of? What are you most thankful for?

## Engage and Serve

To engage and serve is to interact with people, ideas, and materials to understand and act on the needs of others and contribute to society.

At the Academy for Global Citizenship (AGC), a kindergarten through eighth-grade charter school in a low-income neighborhood near Midway Airport on Chicago's southwest side, students learn from day one to focus on the world outside themselves, their school, and even their local community.

The "global" in Academy for Global Citizenship isn't just lip-service to a nice concept. It's how the school guides students to understand the environment in which they exist, and how they can contribute to making it better.

It's what AGC calls a "place-based" approach to education, "which honors the neighborhood and city in which our school exists."

AGC is an International Baccalaureate Primary Years Programme (PYP) school. According to the International Baccalaureate Organization, "the PYP prepares students to become active, caring, lifelong learners who demonstrate respect for themselves and others and have the capacity to participate in the world around them."

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As in some of our other favorite schools, learning is inquiry-based, meaning students are allowed to pursue learning about themes or topics that spark a deep interest in them. At AGC, students follow a “program of inquiry” every six weeks.

Each inquiry follows a cycle proscribed by IB and adapted by AGC. The first step is **invite**, during which the teacher leads her class into the inquiry topic, according to Katherine Elmer-DeWitt,



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the school's external initiatives manager.

Next comes **explore**, during which students “find their own path” into the material and develop their own particular interests.

That's followed by **engage**, when students dive deep into research. Next is **represent**, when students produce something tangible, perhaps a poster, a paper, a work of art—something that “makes learning visible.”

The final two stages are **review** and **act**. Reviewing consists of assessing and reflecting on what has been learned, asking questions and revising. Acting is using that new knowledge and taking thoughtful action to serve the community—be that the school, the neighborhood, the city, the nation, or the world.

Last fall, for instance, second-graders at AGC conducted an inquiry called “making our voices heard.” They explored how individuals across time have used their voices to make change in the world. They brought in current and former activists to describe their work. One was a leading Vietnam war protester in the early 1970s. Another was a former animal rights activist.

As the unit was nearing its end, the Dakota Access Pipeline protests erupted, and students wrote letters to federal officials about the project, asking them to respect the rights of indigenous peoples and not to build the pipeline through sacred

ground.

Although elementary school students are unlikely to change the direction of a heated national debate, they received responses to their letters, which made them feel that engaging with their community in the spirit of service to others could yield an outcome. That's an important life lesson.

***To engage and serve is to interact with people, ideas, and materials to understand and act on the needs of others and contribute to society.***

Children by nature love to learn, and feel a sense of joy about life. As a general rule, they are social creatures. Environmental factors that deprive children of basic needs and security—poverty, for example—can cause these natural tendencies to shrivel. But let's begin with the positive assumption that getting a child engaged with people, ideas, and materials is a relatively easy and simple process.

Developing the capacity to engage and serve uses these natural inclinations to engage a child's interest. Equally important is a sense that the engagement is active, timely, and relevant.

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Scores of youth and church groups descended upon New Orleans after the most acute crisis of the Hurricane Katrina flooding had subsided. Here was an opportunity for young people to engage and serve, to provide timely and crucial assistance to people whose lives were turned upside down by a

disaster unprecedented in American history.

Engaging and serving in an authentic way is far removed from the paternalistic service of colonists and missionaries of the past. There is no sense of being “better than” those whom you are serving. It’s about reciprocity, empathy, compassion, and a deep abiding sense of our common humanity.

That’s why it is important that service learning and community volunteering projects sponsored by schools or districts partner with reputable agencies that know how to provide students with meaningful opportunities, and make time to process their meaning.

Such programs and opportunities are out there, in abun-

dance. It's worth the substantial investment of time and effort by parents and administrators to research them carefully, so that each experience of engaging and serving helps students develop this profound and transformational capacity.

### ***Engage & Serve: At-Home Activity***

There are limitless activities you might participate in with your child to help him develop the capacity to engage and serve.

While there are numerous worthy global charities, young children may find it easier to see the value in helping those in their neighborhood. Shoveling snow or pulling weeds for an elderly neighbor (even if you have to assist in the effort) or running an errand for a sick friend will have an immediate impact on both your child and the neighbor. Use the satisfaction that this experience brings as a springboard for talking about how to serve a broader community.

If you belong to a religious community, there are usually ample opportunities to engage and serve, whether it's serving meals at a soup kitchen, taking a mission trip to the developing world, or cleaning the grounds of your church, synagogue, or mosque.

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The end goal of a Compositive education is to develop, as fully as possible, the four capacities described in this chapter. By their nature, these capacities cannot be taught and learned in school alone. Their development requires the full involvement of family, school, and other institutions meaningful to a given individual. That can mean a religious organization, scouting program, sports program, visual arts, dramatic arts, or music program, or, preferably, all of the above.

Now that we've learned a bit about the capacities, and how they are linked to the Compositive domains, it's time to dive deeper into those domains. If the capacities are our end destination, then the domains are the converging roads that lead us there.

## Chapter 3

### The Domains

In this chapter we are going to dive more deeply into Compostive’s four domains: Cognition, Character, Health & Wellbeing, and Community Engagement. By engaging these four elemental aspects of every human being, we deepen and enrich the educational experience.

As you read this chapter, please bear in mind a key take-away: the most meaningful moments in anyone’s lifetime of education experiences—in school and out—come when these four domains are engaged simultaneously. It’s not possible to engage all four at once all of the time. But smart schools know how to hit two or more domains virtually every moment of every



day. Parents seeking a school for their child should bear this in mind as they visit classrooms. The more domains you see in action at any given moment the better.

It's also important to remember that engaging the domains is the means by which we develop the four capacities described in the previous chapter.

Some of the details we provide in the Appendix on the domains get a bit technical, but we've tried to remove educa-

tional and social science jargon and present our research in this chapter in straightforward, clear language.

## Cognition

A common definition of cognition is “...the processes whereby individuals acquire knowledge from the environment.”<sup>3</sup>

Of course this means more than downloading information. It means processing that information and making meaning from it as well, and understanding how we benefit from experience. Here’s how one school goes about developing this capacity.

At the New School of San Francisco, a much in-demand public charter school in the Mission District, students from their first day of kindergarten began engaging in what the school calls inquiry-based learning.

What does the New School mean by inquiry-based learning? Here’s how school leaders described it in their charter application. It’s worth quoting at length:

*The inquiry process is driven by one’s own curiosity, wonder, interest, and passion to understand an observation or to solve a problem.*

*The process begins when the learner notices something that intrigues, surprises, or stimulates a*

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3 Sparrow, S.S., & Davis, S.M. (2000). Recent advances in the assessment of intelligence and cognition. *Journal of Child Psychology & Psychiatry*, 41(1), 117-131.

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*question—something that is new, or something that may not make sense in relationship to the learner’s previous experience or current understanding.*

*The next step is to take action—observing, raising questions, making predictions, testing hypotheses, and creating conceptual models.*

***The learner must find her own path through this process. It is rarely a linear progression.***

*The learner must find her or his own pathway through this process. It is rarely a linear progression, but rather more of a back-and-forth or cyclical series of events.*

*As the process unfolds, more observations and questions emerge, providing for deeper interaction with the phenomena—and greater potential for further development of understanding.*

*Along the way, the inquirer collects and records data, makes representations of results and explanations, and draws upon other resources such as books, videos and the expertise or insights of others.*

*Making meaning from the experience requires*

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*reflection, conversation, comparison of findings with others, interpretation of data and observations, and the application of new conceptions to other contexts. All of these serve to help the learner construct an improved mental framework of the world.*

The New School employs what it refers to as “inquiry arcs,” discrete units of learning that span eight to 12 weeks. Typically, a class will work through three inquiry arcs during a school year.

Arcs begin with **exploration**, during which students launch the initial period of inquiry. It then moves to **expression**, in which students demonstrate their learning through “various forms of creation.” This can range from writing to artistic expression to teaching others, and beyond. Finally, the arc concludes with **exposition**, a final showcase of learning during which students reflect on their successes and challenges.

During the school’s inaugural year, 2015-16, with just kindergartners and first-graders, the first inquiry arc was “what is our community?” Students and teachers together defined the community in concentric circles: the classroom, the school, the Mission District.

Inquiry-based learning as practiced by the New School provides a great example of a model that engages multiple domains, led by Cognition. As you’ll see in the appendices,

developing Cognition means promoting **cognitive processes** and developing **cognitive capacities**.

### ***Cognition: An At-Home Activity***

Here's an activity that can help spark cognition in your child:

Explore nature with your child, either inside your home or outside. You won't need to go far to find plenty of interesting things to look at—plants, trees, vegetables, gravel, insects, sticks, rocks, water, and so on. Ask your child to choose something that he or she would like to look at closely and learn more about. With your child, talk about what he or she chose. Ask such questions as:

- Why did you choose this?
- What interests you most about it?
- What different parts does it have?
- Where do you think it came from?
- What do you notice about it?
- What words can describe it (hard, soft, smooth, bumpy, heavy)?
- What do you wonder about it? What would you like to know about it?

Have your child draw a picture of the object he or she

chose. Then help your child write one or two things that he or she would like to learn about it.

You'll find a great deal more information about the research behind the Cognition domain in Appendix I at the back of this book.

## Character

Developing a child's Character means developing his or her way of being in the world. Many schools claim to feature character education, and promote positive character traits with slogans on walls and a sincere, but often shallow, dedication to promoting those traits in their students.

Compositive believes that authentic Character education goes deep, and comprises an ingrained, ongoing feature of a Whole Education.

We believe Character education helps develop character in ways that fall into two general categories: **moral character** and **performance character**.<sup>4</sup> Here's an example of a school that excels at promoting this type of character development.

We return to the private K-12 MUSE School, located in a canyon just east of Malibu, California.

MUSE School consciously and deliberately focuses on

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<sup>4</sup> Lickona, T. & Davidson, M. Smart and good high schools. Washington DC: Character Education Partnership.

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educating in all four Compositive domains, but clearly leads with the heart.

“How do we encourage our students to be good people?” is one of the school’s guiding questions, said Caitlin Roche, MUSE’s Early Childhood and Elementary School Director. “You start with the heart and you go from there.”

Nowhere is the focus on heart more evident than in the central place the Process Communication Model (universally known at MUSE as PCM) holds at the school. PCM helps educators and students alike understand the varied ways different personality types approach the world, learning, and relationships.

***“You’re hard-pressed to have success in a learning community if you don’t place a premium on relationships.”  
- Dennis Campbell***

“You’re hard-pressed to have success in a learning community if you don’t place a premium on relationships,” said Middle and High School Director Dennis Campbell.

All teachers take the PCM Personality Pattern Inventory assessment and are trained in PCM as they enter the school



community. Students take the Inventory when they enter middle school.

PCM lingo pervades the school, starting with the four channels, or communication styles: **play**, **care**, **ask**, and **tell**. Even the youngest kids will tell a teacher “you’re not in my channel,” if communication has gone awry. Younger children tend to float among the channels. As they get older, they tend to settle on one or two preferred channels.

“Any given day, students will walk in and they are empowered to decide how they want to be spoken to,” MUSE co-founder Rebecca Amis explains in a MUSE video. “This is their way to say ‘I’m Rebecca and today I want to be played with.’”

MUSE also recognizes that different students have different

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“environmental preferences.” Some prefer to work alone, others one-on-one with teachers, others in small groups, and some in large groups. Teachers encourage students to try all four environments, and classrooms are set up to facilitate time in any of the four.

The best example we found of the effectiveness of MUSE’s Character approach came from Sarah Gerth Jones, mother of five, all MUSE students. One of her youngest, a second-grader, had struggled at other schools, including some of LA’s most exclusive private schools.

“He was far behind in reading, struggling so much, he hated school,” Jones said. “I had moments, days of crying.” She was told her son had ADHD and needed medication. But she doubted the diagnosis.

When she moved him to MUSE, the problems vanished within weeks. “They figured out he was the PCM ‘rebel’ type, and needed to bounce around and do things in his own way. His teacher even bought him a wiggly chair.”

A month after enrolling at MUSE he was reading at grade-level, and soon thereafter, he surpassed his twin brother.

“They love him so much here. He’s thriving,” his mother said.

At Compositive, we believe Character education helps develop character in ways that fall into general categories:

moral character and performance character. As you'll see when you dive into the appendices, the MUSE School example hits both categories.

### ***Character: An At-Home Activity***

When a conflict occurs, between siblings or your child and a friend at your house, have the parties to the dispute sit in "peace chairs," designated chairs somewhere in the house. The idea is to have the two children learn to resolve disputes without parental/adult involvement. The structure of the peace chair conversation is that each child is allowed to say "when you did X, I felt..." The other party listens until the first is finished, and then roles are reversed. It is important that clear rules be developed. They can even be posted on a wall near the peace chairs. A couple of rules that generally work are: no shouting, and no hiding faces. This exercise can also be attempted between adult and child, but seems to work best with peers.

Please turn to Appendix I to delve deeply into the research behind the Character domain.

## Health & Wellbeing

At Compositive, we believe that education that stresses Health & Wellbeing nurtures lifelong wellness behaviors that promote physical and mental health. But it goes a step farther as well. Health & Wellbeing education also helps children internalize the life skills needed to be a productive and functioning member of society.

So we divide a Health & Wellbeing education into two broad areas: **healthy behaviors** and **life skills**. In our travels, we found several schools that promote both. None does it better than Chicago's Namaste Charter School.

At Namaste Charter School on Chicago's southwest side, the first thing you notice is the focus.

Walk into any classroom and you see every student, whether in 5 or 12 years old, locked into the task at hand.

Whether it's kindergartners going around in a circle sounding out words with remarkable fluidity, or seventh-graders in an advisory class checking in about how they're feeling that day, every student in every classroom seems engaged, as if he or she wants nothing more than to be in school.

Namaste has been in operation for 13 years and in that time it has become a pillar of the charter school community—not only

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in Chicago, but nationally. And it didn't take us long when we visited to see why.

The school was founded on six pillars, or core values, that have held steady throughout the school's life. "It hasn't required a lot of tweaking, because it works," said Kathy Argentar, Namaste's development manager.

Nutrition, health, and wellness is one of the pillars. It starts with healthy, nutritious and tasty food. The day we visited we built a salad from the salad bar, had a bean burger, jicama fries and fresh fruit. It was satisfying and delicious, but didn't leave



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us feeling weighted down. On other days we might have had red beans and rice, turkey lasagna, or southwestern corn salad.

As you might expect from a school named Namaste (which means, roughly “the light in me sees the light in you”), mindfulness meditation and yoga start each day. From 8:30 to 8:35, all classes begin their day with “morning movement.” What that looks like depends on the age of the kids and the mood of the class on a given day.

As a general rule, Argentar said, first thing in the morning, “middle-schoolers need to wake up, and kindergartners need to calm down.” Morning movement reflects those needs.

“It’s a tailored routine to get them ready to learn,” she said.

There’s a wellness focus for teachers as well. “Teachers need to develop social-emotional learning skills not only as teachers, but for themselves as well,” said Shannon Feeney, an instructional leader at Namaste. “Knowing how difficult and demanding teaching is, they need to know how to monitor themselves, to have the self-awareness to engage in self-care.”

Acting head of school Stephanie Bloom said teachers are encouraged to “find five” at least once a day. That means setting aside five minutes for some mindfulness meditation, or to take a walk. “We care about keeping our staff healthy,” she said.

Another of the pillars is movement. All students have one

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hour of physical education each day, as well as a structured, 20-minute recess. On top of that, there are movement breaks interspersed throughout the day.

During recess the day we visited, first and second-graders were free to choose among stations featuring running, basketball, four-square, and calisthenics. “Flames [Namaste’s mascot], fire up!” teacher Vanessa Acuna exhorted through a loudspeaker.

The school has three full-time physical education teachers, a gym, a yoga center, and a physical education room—which has more than two dozen spin bikes and elliptical machines.

## ***The premise is simple: Healthy, active kids do better in school.***

During a first-grade P.E. class, students danced and leapt about exuberantly to a video featuring electronic and hip-hop style music. Some mimicked the moves of the animated figures on the large flat screen. Others freestyled. All were getting a lot of exercise.

The premise is simple: healthy, active kids do better in school.

### ***Health & Wellbeing: An At-Home Activity***

Challenge your child to develop a new healthy habit (e.g., drinking 8 glasses of water a day) over the course of one week. Help your child pick her new habit and join the challenge with her. That is, pick the same (or your own) health habit to develop over the week. Check in with each other every night at the dinner table. If the challenge is successful, extend it beyond one week (e.g., a month-long challenge) or pick a new healthy habit for the next week.

You'll find a great deal of information about Health & Wellbeing and its subdomains in Appendix I.

## Community Engagement

Ultimately, a well-rounded, whole-child education lacks meaning and is incomplete unless, and until, it connects back to the broader world in authentic ways.

A child can have fully internalized all components of Cognition, Character, and Health & Wellbeing, but she will remain unfulfilled unless she has ample opportunities to offer her skills and wisdom to the world. That's why we have included Community Engagement among the four Compositive domains.

The best school-based example of Community Engagement we saw was at the Academy for Global Citizenship in Chicago.

You can read our description of AGC and its connectedness to the larger world under the “Engage and Serve” section of the chapter on Compositive capacities.

What we call a Community Engagement education focuses on two broad areas of engagement:



**engagement experiences** and **tools for engagement**. Read about the research basis for engagement in Appendix I.

*A well-rounded education lacks meaning unless it connects back to the broader world in authentic ways.*

### ***Community Engagement: An At-Home Activity***

Sit down with your child and talk about acts of service—things that people do for other people just to make them feel good. Make a list of acts of service your child could do, like shoveling snow for a neighbor, raking leaves for a friend, or walking a grandparent’s dog. Keep the list someplace visible and encourage your child to perform an act on a regular basis (daily or weekly). When possible, have him offer the service anonymously so that the activity is truly about service, not praise. Every time an act is completed, talk about how it felt to offer up that service.

There’s more detailed information about the Community Engagement domain and its subdomains in Appendix I.

## Epilogue

### What's Next for Compositive?

As parents, we all want to raise children who go on to lead rich, fulfilling lives filled with healthy, loving relationships and meaningful work. We also want our children to have a passion for making positive contributions to their wider and more local community. Ultimately, we hope our children strive to leave the world a more just, peaceful place than they found it.

As you've read in these pages, Compositive believes that if through parenting and schooling we can develop children who reflect and learn, recognize and act, care and connect, and engage and serve, we will have made great progress toward fulfilling those goals.

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We have developed a two-pronged approach to promoting our model of Whole Education. First, through a series of short books like this one, and a website rich in practical, actionable information for parents, we hope to create a wave of parental advocacy for the kind of Whole Education we propose in this book.

Visit **compositive.org** for in-depth articles, parenting tips, links to research, interactive quizzes, moderated online forums, and other content that will help make your home a place where Whole Education thrives, and where your children develop the Compositive capacities. We hope that **compositive.org** will become a strong online community and center for Whole Education advocacy.

Second, Compositive is in the process of developing the first **Compositive Primary**, an independent ECE–5, workplace-based school located on the Fitzsimons Innovation Campus in Aurora, Colorado. It will open for the 2019-20 school year. For more information, visit **compositiveprimary.org**.

Stay tuned to **compositive.org** for more details on Compositive Primary. Rest assured that it will embody the Compositive philosophy, which means developing in its students the four capacities, by simultaneously engaging the four domains.

# Appendix I

## Subdomain Research

### Cognition Subdomains: The Research Basis

#### *Cognitive processes*

One research study defines cognitive processes as the highest levels of key intellectual functions, including problem solving and critical thinking.<sup>5</sup> These **mental processes** are then overlaid with **control processes** related to executive functions, such as planning, choosing strategies, and executing those strategies. Working memory, inhibition, and cognitive flexibility are key components of executive functioning.

Let's touch on each of these processes, and, where available,

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5 Sparrow & Davis (2000).

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provide examples of research-based programs that help young people develop them.

### **Mental processes: problem solving**

Problem solving is a critical cognitive activity that permeates many aspects of our day-to-day lives from infancy forward. Even very young children show signs of developing the ability to link newfound skills together to solve a problem.

### **Mental processes: critical thinking**

Psychology professor Diane Halpern succinctly defines critical thinking as “the use of those cognitive skills or strategies that increase the probability of a desirable outcome.” She also writes that critical thinking “is used to describe thinking that is purposeful, reasoned, and goal-directed—the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions...”

Research has found a limited number of programs that specifically focus on developing critical thinking skills. Studies also have found that explicitly teaching those skills through real-world, authentic problems is more effective than embedding development of those skills in curricula.<sup>6</sup>

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<sup>6</sup> Butler, H.A., Dwyer, C.P., Hogan, M.J., Franco, A., Rivas, S.F., Saiz, C., & Almeida, L.S. (2012). The Halpern Critical Thinking Assessment and real-world outcomes: Cross-national applications. *Thinking Skills and Creativity*, 7, 112-121. doi: 0.1016/j.tsc.2012.04.001.



### **Control processes: executive functioning**

Executive functioning involves selecting and successfully monitoring behaviors that help you attain chosen goals. One researcher wrote that the main purpose of executive functioning is problem-solving that involves “...representing a problem flexibly, planning organized

sequences of thought or action, executing those sequences, and evaluating the results.”<sup>7</sup>

The following three control processes are subsets of executive functioning.

**Working memory:** Psychologist Adele Diamond defines working memory as “working with information no longer perceptually present,” or “holding information in mind and mentally working with it.”<sup>8</sup>

**Inhibition:** Diamond says inhibition in the context of execu-

<sup>7</sup> Zelazo, P.D., Carter, A., Reznick, J.S., & Frye, D. (1997). Early development of executive function: A problem-solving framework. *Review of General Psychology*, 1(2), 198-226.

<sup>8</sup> Diamond, A., & Ling, D. S. (2016). Conclusions about interventions, programs, and approaches for improving executive functions that appear justified and those that, despite much hype, do not. *Developmental Cognitive Neuroscience*, 18, 34-48.

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tive function is “the ability to control one’s attention, behavior, thoughts, and emotions to override a strong internal predisposition or external lure, and instead do what is more appropriate or needed.”<sup>9</sup>

Cognitive flexibility: Diamond describes cognitive flexibility as “the ability to change perspectives on a problem and adjust to a new situation with new demands and constraints.”<sup>10</sup>

### *Cognitive capacities*

Compositive groups cognitive capacities under four broad categories: **artistic and musical**; **verbal/linguistic/literacy**; **visual-spatial**; and **logical-mathematical**. Howard Gardner’s seminal work on intelligence states that there are multiple intelligences that correspond to different ways we connect to the world.<sup>11</sup> Moreover, each intelligence has its own pattern of brain activity.

### **Artistic and musical**

Research studies have found that music and artistic programs can improve children’s achievement and performance in other areas, including phonological awareness and reading development<sup>12</sup> as well as computing fractions.

9        Ibid.

10       Ibid.

11       Gardner, H., & Hatch, T. (1989). Multiple intelligences go to school: Educational implications of theory of multiple intelligence. *Educational Researcher*, 18(8), 4-10.

12       Anvari, S., Trainor, L., Woodside, J., Levy, B. (2002). Relations among musical skills, phonological processing, and early reading ability in preschool children. *Journal of Experimental*

### **Verbal/linguistic/literacy**

According to Howard Gardner's multiple intelligences work, linguistic intelligence consists of "sensitivity to the sounds, rhythms, and meanings of words; sensitivity to the different functions of language."<sup>13</sup>

### **Visual-spatial**

Howard Gardner refers to spatial intelligence as "capacities to perceive the visual-spatial world accurately and to perform transformations on one's initial perceptions." Research has found that gender differences in spatial abilities do exist, and can be observed as early as infancy.<sup>14</sup> But these differences sure small and readily mitigated though everyday experiences (have your daughter play with Lincoln Logs or Legos, for example).<sup>15</sup> Unverified perceptions of gender differences abound, and may help explain why people incorrectly assume that boys are naturally "better" at math and science than girls.<sup>16</sup>

### **Logical-mathematical**

According to Howard Gardner, logical-mathematical intelligence refers to "sensitivity to, and capacity to discern, logical or

Child Psychology. 83(2): 111-130.

13 Gardner's Multiple Intelligences. (n.d.). Retrieved from <http://www.tecweb.org/styles/gardner.html>

14 Moore, D.S., & Johnson, S.P. (2008). Mental rotation in human infants: A sex differences. *Psychological Science*, 19(11), 1063-1066. doi: 10.1111/j.1467-9280.2008.02200.x.

15 Ibid.

16 Ibid.

numerical patterns; ability to handle long chains of reasoning.” Research has found that cognitive processes like executive functioning influence children’s development of mathematical skills.

## Character Subdomains: The Research Basis

### *Moral character*

What we call moral character provides the foundation for successful interpersonal relationships and ethical behavior. These qualities include **modesty/humility**, **spirituality** (broadly defined, as described below), **authenticity/honesty/integrity**, and a range of social and emotional abilities. Let’s briefly examine each of these qualities.

### **Modesty/humility**

Here’s an excellent definition of humility: “Letting one’s accomplishments speak for themselves, not seeking the spotlight, and not regarding oneself as more special than one is.”<sup>17</sup> Researchers have found that humility is a central attribute of youth who have established a sense of purpose.

It’s important to note that beliefs about and manifestations of humility differ widely from culture to culture. In individualistic cultures like ours, youth generally report less favorable attitudes

<sup>17</sup> Peterson, C., & Seligman, M. E. (2004). Character strengths and virtues: A handbook and classification. Washington: American Psychological Association.

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toward modest, humble behaviors than do youth from more collectivist cultures.<sup>18</sup> At Compositive, we believe parents and teachers should help instill authentic humility in young people.

### **Spirituality**

Spirituality, in a broad sense, means having beliefs about the higher purpose and meaning of life that shapes conduct and provide comfort. Although spirituality and religiosity are often conflated, research attempting to disentangle the two has found that broader spiritual beliefs were significant predictors of happiness.<sup>19</sup> Youths who participate in religious activities have a significantly lower incidence of risky behaviors and a higher likelihood of positive behaviors.

Research studies have also found that:

- Spirituality has significant benefits for children and adolescents, including positive attitudes, well-being, and physical health.<sup>20</sup>

- Affiliation with a religion is predictive of better overall physical health for children and adolescents and better psychological health among early adolescents compared to not having a reli-

18 Fu, G., Heyman, G.D., & Kang, J. (2011). Reasoning about modesty among adolescents and adults in China and the U.S. *Journal of Adolescence*, 34(4), 599-608. doi:10.1016/j.adolescence.2010.10.003.

19 Dowling, E.M., Gestdottir, S., Anderson, P.M., von Eye, A., Almerigi, J., & Lerner, R.M. (2004). Structural relations among spirituality, religiosity, and thriving in adolescence. *Applied Developmental Science*, 8(1), 7-16.

20 Yonker, J.E., Schnabelrauch, C.A., & DeHann, L.G. (2012). The relationship between spirituality and religiosity on psychological outcomes in adolescents and emerging adults: A meta-analytic review. *Journal of Adolescence*, 35, 299-314. doi:10.1016/j.adolescence.2011.08.010.

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gious affiliation or identifying as atheist or agnostic.<sup>21</sup>

- Spirituality is also linked to reductions in mental health problems and risky behaviors.<sup>22</sup>

### **Authenticity/honesty/ integrity**

Taken together, these qualities mean presenting oneself in a

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21      Ibid.  
22      Ibid.



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genuine way and acting in a sincere way, being without pretense, and taking responsibility for one's feelings and actions. Research has found that these attributes correlate with positive outcomes like high academic achievement, and fewer social-emotional problems among young people.

One study in particular found several positive benefits from authenticity, honesty and integrity, including higher GPAs among students, and greater conscientiousness among middle school students, as well as social skills that promote cooperation.<sup>23</sup>

### ***Social and emotional abilities***

These encompass skills needed for effective and ethical relationships and work, as well as self-care. One study says social and emotional skills include “recognizing and managing emotions, developing caring and concern for others, establishing positive relationships, making responsible decisions, and handling challenging situations constructively and ethically.”<sup>24</sup> Research shows that social competence and academic competence influence each other over time in a positive and reciprocal fashion.<sup>25</sup>

Under the broad heading of social and emotional abilities, we have identified a number of sub-traits that are particularly rele-

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23 Peterson, C., & Park, N. (2006). Character strengths in organizations. *Journal of Organizational Behavior*, 27(8). Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1002/job.398>

24 What is SEL? (n.d.). Retrieved from <https://casel.org/what-is-sel/>

25 Wagner, L., & Ruch, W. (2015). Good character at school: Positive classroom behavior mediates the link between character strengths and school achievement. *Frontiers in Psychology*, 6, 1-13.

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vant in the educational context:

- Prosocial behavior/empathy: Leads to better academic achievement and stronger, more positive peer relationships.<sup>26</sup>

- Teamwork/leadership: Enhanced by group activities, helps prevent kids from internalizing problematic behaviors.<sup>27</sup>

- Social belongingness in a school community: Leads to positive outcomes for youth, ranging from academic performance to motivation and self-esteem.<sup>28</sup>

- Gratitude: Develops in older children, and which has been found to promote happiness.<sup>29</sup>

- A sense of fairness: Leads to better social and academic outcomes for children and adolescents. It also may be related to lower levels of emotional problems.<sup>30</sup>

- Forgiveness: Despite common misconceptions about middle-school children, actually enhances a forgiving student's popularity.<sup>31</sup>

- Love, given and received: Leads to improved social and psychological functioning across the years of childhood and adolescence, with positive effects even during early childhood

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26 Wentzel, K.R. (1993). Does being good make the grade? Social behavior and academic competence. *Journal of Educational Psychology*, 85(2), 357-364.

27 Park, N., & Peterson, C. (2006a). Moral competence and character strengths among adolescents: The development and validation of the Values in Action Inventory of Strengths for Youth. *Journal of Adolescence*, 29, 891-909.

28 Shochet, I. M., Dadds, M.R., Ham, D., & Montague, R. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results from a community prediction study. *Journal of Clinical Child and Adolescent Psychology*, 35(2), 170-179.

29 Park & Peterson, (2006a).

30 Ibid.

31 Ibid.

(no surprise here!).<sup>32</sup>

## *Performance character*

Performance character encompasses qualities an individual needs to realize his or her potential in academics, extra-curricular activities, the workplace, and other areas of endeavor. These qualities include **self-control, creativity and curiosity, motivation, mindset, a sense of purpose, and resilience**. Following are brief descriptions of each of these qualities.

### **Self-control**

Self-control is “voluntary self-governance in the service of personally valued goals and standards.”<sup>33</sup> Self-control can lead to a variety of positive outcomes including academic achievement, decreased risk-taking, fewer health problems, and a decreased risk for substance dependence, criminal conviction, and money troubles.<sup>34</sup>

Self-control is also a better predictor of academic performance than IQ in adolescents, according to one study.<sup>35</sup>

We’ve found that self-control also contains several sub-traits that help enrich our understanding of this key performance char-

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32 Ibid.

33 Duckworth, A. L., & Kern, M. L. (2011). A meta-analysis of the convergent validity of self-control measures. *Journal of Research in Personality*, 45(3), 259-268. doi:10.1016/j.jrp.2011.02.004

34 Ibid.

35 Roberts, B. W., Jackson, J. J., Fayard, J. V., Edmonds, G., & Meints, J. (2009). Conscientiousness. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 369-381). New York, NY, US: Guilford Press.

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acteristic:

- Conscientiousness: “The propensity to follow socially prescribed norms for impulse control, to be goal directed, to plan, and to be able to delay gratification and to follow norms and rules.”<sup>36</sup>

- Grit: The “perseverance and passion for long-term goals,” according to researcher Angela Duckworth, who has written a popular book on grit.<sup>37</sup>

- Self-regulated learning: “Control processes used to direct thinking and translate thinking into academic outcomes.”<sup>38</sup>

### **Creativity and curiosity**

Here’s a good working definition of creativity: “Thinking of novel and productive ways to conceptualize and do things.” And curiosity: “Taking an interest in ongoing experience for its own sake; finding subjects and topics fascinating; exploring and discovering.”<sup>39</sup> Each alone can be a powerful driver of character.

Creativity is enhanced, and leads to academic success, when a student’s creative inclinations are matched by creative instruction. In other words, creative teachers are essential to building creativity in students.

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36 Roberts, Jackson, Fayard, Edmonds, & Meints, (2009).

37 Duckworth, A. (2016). *Grit the power of passion and perseverance*. New York: Scribner.

38 Duckworth, A.L., & Seligman, M.E.P. (2005). Self-discipline outdoes IQ in predicting academic performance of adolescents. *Psychological Science*, 16(12), 939-944.

39 Peterson, C., Park, N., Hall, N., & Seligman, M.E.P. (2009). Zest and work. *Journal of Organizational Behavior*, 30, 161-172.

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Curiosity makes people open to new experiences, which in turn boosts not only academic performance but life satisfaction and happiness.<sup>40</sup>

### **Motivational (growth) mindset, and mindset sub-qualities**

“In a growth mindset students understand that their talents and abilities can be developed through effort, good teaching and persistence,” writes Carol Dweck, an education professor at Stanford University.<sup>41</sup> Its opposite is a fixed mindset, when students believe they can’t improve, so why bother trying? The fixed mindset leads to a feeling of learned helplessness—which puts them at a disadvantage when it comes to academic achievement and grade point average.

An interesting finding from growth mindset research is that praising children for intelligence and performance (as opposed to effort) can have unfavorable effects. One well-known study found that children praised for performance become performance-oriented and struggle with failures. If you are praised only for performance, but experience a failure, then failure is something about you and a permanent condition (i.e., you’re a failure and will always be).<sup>42</sup>

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40 Kashdan, T.B., & Yuen, M. (2007). Whether highly curious students thrive academically depends on perceptions about the school learning environment: A study of Hong Kong adolescents. *Motivation and Emotion*, 31, 260-270. doi: 10.1007/s11031-007-9074-9.

41 Stanford University’s Carol Dweck on the Growth Mindset and Education. (2016, April 18). Retrieved from <https://onedublin.org/2012/06/19/stanford-universitys-carol-dweck-on-the-growth-mindset-and-education/>

42 Mueller, C. M. & Dweck, C. S. (1998). Intelligence praise can undermine motivation

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It's also important to draw a distinction between intrinsic and extrinsic motivation. Intrinsic motivation refers to a desire to engage in an activity because of an inherent interest in the activity or pleasure gained from the activity. Extrinsic motivation, on the other hand, refers to a desire to engage in an activity because of an external goal like praise, money, or recognition.

Not surprisingly, research has found that students driven by intrinsic motivation tend to have significantly higher academic achievement than students who aren't.<sup>43</sup>

We've identified several sub-qualities that we've grouped under motivation as well. Very briefly, they include:

- Initiative: Drives people toward future goals.

and performance. *Journal of Personality and Social Psychology*, 75, 33-52.

43 Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014, February 3). Intrinsic Motivation and Extrinsic Incentives Jointly Predict Performance: A 40-Year Meta-Analysis. *Psychological Bulletin*.

Advance online publication. <http://dx.doi.org/10.1037/a0035661>

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- Self-concept (or self-awareness): Susceptible to outside, adult influence among children.
- Self-efficacy: An individual's belief in his or her capacity to execute behaviors necessary to succeed, which translates from the academic to the occupational realm.
- Hope and optimism: Linked to higher levels of academic achievement and happiness.
- Zest/vitality: A positive trait reflecting a person's approach to life with anticipation, energy, and excitement, which research has found helps lead to satisfaction and happiness.

### **Resilience**

Resilience is the ability to adapt in positive ways to significant adversity. To be resilient, one must possess coping skills, as well as be adaptable to changing circumstances.

But resilience doesn't necessarily equate to thriving; in fact, maintaining normal functioning despite adversity (or surviving) is a form of resilience.

While some people may naturally tend more toward resilience than others, research demonstrates that parenting can have a significant impact on resilience. Parenting characterized by warmth, involvement, and high expectations fosters resilience.<sup>44</sup>

Connections with caring adults and a positive community

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<sup>44</sup> Masten, A. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238. doi: 10.1037//0003-066X.56.3.227.

help build resilience. Early competence and attachment relationships provide children with the resources to deal with adversity as they grow.

## Health & Wellbeing Subdomains: The Research Basis

### *Healthy behaviors*

Healthy behaviors, as defined by the Office of Adolescent Health of U.S. Department of Health and Human Services, covers a variety of areas including physical activity, nutrition, mental health, and avoidance of risky behaviors like alcohol and drug use, and sexual activity.

We look at healthy behaviors through four lenses. The first is **healthy relationships**, which includes family, peer and romantic relationships, and mentoring/non-parental adults. The second is **physical health and maintenance**, including hygiene and regular check-ups, nutrition, physical activity, and sleep. The third is **avoidance of risky behaviors**, and the fourth is attending to **mental health**.

### **Healthy relationships**

Research shows that young people benefit physically and mentally from healthy relationships with family, peers, and adult

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mentors other than parents.<sup>45</sup>

Parenting is, of course, especially important. Research over the years has found that “authoritative parenting” leads to a variety of positive psychosocial outcomes. Authoritative parenting is characterized by warmth, high expectations, and supervision.<sup>46</sup>

While authoritative parenting benefits all children, youth from different racial and ethnic backgrounds may flourish in response to other parenting styles.

As anyone who has raised adolescents knows, as kids grow older, peer and romantic relationships began to take on equal or even greater importance. For example, people who experienced peer rejection during adolescence experienced lower overall life satisfaction in middle adulthood, according to one study.<sup>47</sup> Conversely, strong friendships during adolescence help develop well-adjusted adults.

At the same time, research shows, the kinds of relationships adolescents develop with peers are heavily influenced by their relationship with their parents.<sup>48</sup>

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45 Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 62, 1049–1065.

46 Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of Competence and Adjustment among Adolescents from Authoritative, Authoritarian, Indulgent, and Neglectful Families. *Child Development*, 62(5), 1049-1065. doi:10.1111/j.1467-8624.1991.tb01588.x

47 Marion, D., Laursen, B., Zettergren, P., & Bergman, L. R. (2013). Predicting Life Satisfaction During Middle Adulthood from Peer Relationships During Mid-Adolescence. *Journal of Youth and Adolescence*, 42(8), 1299-1307. doi:10.1007/s10964-013-9969-6

48 Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 62, 1049–1065.

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Adolescents who had strong relationships with their mother were less likely to have intense romantic engagements during mid-adolescence, suggesting that such engagements aren't developmentally appropriate during mid-adolescence.<sup>49</sup>

Mentoring, non-parental adult relationships, are also important to personal and academic growth.<sup>50</sup>

49 Roisman, Glenn I., Caroline Booth-LaForce, E. Cauffman, S. Spieker, and the NICHD Early Child Care Research Network (2009). The developmental significance of adolescent romantic relationships: Parent and peer predictors of quality and engagement at age 15. *Journal of Youth and Adolescence*, 38(10), 1294-1303.

50 Schwartz, S.E.O., Rhodes, J.E., Chan, C.S., & Herrera, C. (2011). The impact of school-based mentoring on youths with different relational profiles. *Developmental Psychology*, 47(2),

## **Physical health and maintenance**

Physical health and maintenance includes hygiene, nutrition, physical activity, regular check-ups, and sleep. Parents can exert major influence over their children's health maintenance, even into adolescence.

Hygiene is the most basic form of physical cleanliness, including good hand-washing habits.

Good nutrition sharpens the body and mind, yet many adolescents damage their physical health and mental acuity with atrocious eating habits. Regularly eating dinner with family has been shown to have many benefits for children and adolescents (e.g., less likely to be overweight, more fruit consumption, and fewer risky behaviors, better social-emotional health).<sup>51</sup>

Regular physical activity from an early age promotes life-long fitness and reduces the risk of the most common killers, including heart and circulatory problems.

Regular physical check-ups, including dental, hearing and vision, help catch problems early, some of which can lead to learning challenges.

Poor sleep habits are associated with a variety of negative outcomes including risky behavior, cognitive functioning, and psychological problems. Parents have a significant influence

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450-462. doi: 10.1037/a0021379.

51 Fulkerson, J. A., Kubik, M. Y., Story, M., Lytle, L., & Arcan, C. (2009). Are There Nutritional and Other Benefits Associated with Family Meals Among At-Risk Youth? *Journal of Adolescent Health, 45*(4), 389-395. doi:10.1016/j.jadohealth.2009.02.011

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on children's sleep, as positive relationships with parents and parent-set bedtimes are associated with better sleep outcomes.<sup>52</sup> Overuse of technology also can have negative impacts on sleep.

### **Avoidance of risky behaviors**

Avoiding risky behaviors is especially important during adolescence, a time during which people generally take more uncalculated risks. Substance use, risky sexual behaviors, and delinquency are the most common manifestations of risky behavior. Research shows that peers can increase risk-taking during adolescence, while parents can serve as a protective factor against risk-taking, particularly substance use.

Risky behaviors during adolescence are linked to a variety of negative outcomes later in life, including psychological problems, criminality, and poorer interpersonal relationships than their peers.<sup>53</sup>

Younger children also need to learn to avoid risky behaviors, like dashing out into the street without looking. Research suggests that pedestrian safety behaviors can be improved through intervention.<sup>54</sup>

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52 Mueller, C.E., Bridges, S.K., & Goddard, M.S. (2011). Sleep and parent-family connectedness: Links, relationships and implications for adolescent depression. *Journal of Family Studies*, 17(1), 9-23.

53 Tapert, S.F., Arons, G.A., Sedlar, G.R., & Brown, S.A. (2001). Adolescent substance use and sexual risk-taking behavior. *Journal of Adolescent Health*, 28, 181-189.

54 Schwebel, D. C., Barton, B. K., Shen, J., Wells, H. L., Bogar, A., Heath, G., & Mccullough, D. (2014). Systematic Review and Meta-Analysis of Behavioral Interventions to Improve Child Pedestrian Safety. *Journal of Pediatric Psychology*, 39(8), 826-845. doi:10.1093/jpepsy/jsu024

## **Attending to mental health**

Although attending to mental health might seem outside the scope of a Health & Wellbeing education, the mind is, after all, inseparable from the body. And the state of one's mental health has a profound impact on one's physical health.

The World Health Organization defines mental health as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.”

Conversely, poor mental health leads to riskier behaviors, including substance abuse. According to the 2015 Youth Risk Behavior Survey of high school students, 8.6 percent of students had attempted suicide in the previous year, 14.6 percent made a plan about how they would attempt suicide in the previous year, and 17.7 percent had seriously considered attempting suicide in the previous year.<sup>55</sup> Girls had higher rates of considering suicide, making a suicide plan, and attempting suicide compared to their male counterparts.<sup>56</sup>

About one in ten high school students (29.9%) reported feeling sad or hopeless almost every day for 2 or more weeks

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55      Kann L, McManus T, Harris WA, et al. Youth Risk Behavior Surveillance — United States, 2015. *MMWR Surveill Summ* 2016;65(No. SS-6):1–174. DOI: <http://dx.doi.org/10.15585/mmwr.ss6506a1>

56      Ibid.

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in a row that led to changes in their activities.<sup>57</sup> This was more common among girls (39.8%) compared to males (20.3%).<sup>58</sup>

Children seemed susceptible to mental health issues regardless of family composition and socioeconomic status, but were found to be especially susceptible at the socioeconomic extremes.<sup>59</sup> A variety of intervention programs have demonstrated effectiveness in dealing with some mental health issues.<sup>60</sup>

Generally, girls and boys demonstrate different mental health vulnerabilities, with girls displaying a susceptibility to internalizing problems (e.g., anxiety and depression) and boys experiencing higher levels of externalizing problems (e.g., delinquent behaviors).<sup>61</sup>

## ***Life skills***

Life skills are the skills that enable us to succeed in the environments we live in. These include behavioral, cognitive, interpersonal, and intrapersonal skills.

Youth who participate in life skills programs demonstrate positive benefits as a result of their participation. Beneficial

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57 Ibid.

58 Ibid.

59 Luthar, S. S., & Goldstein, A. (2008). Substance use and related behaviors among suburban late adolescents: The importance of perceived parent containment. *Development and Psychopathology*, 20, 591-614.

60 Ibid.

61 Merikangas, K.R., He, J., Burstein, M., Swanson, S.A., Avenevoli, S., Cui, L., Benjet, C., et al., Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: Results from the National Comorbidity Study-Adolescent Supplements (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(10), 980-989. doi: 10.1016/j.jaac.2010.05.017



outcomes are seen for at-risk youth, youth with cognitive/intellectual developmental disabilities, and youth with physical disabilities.<sup>62</sup>

The skills Compositive focuses on are: **daily living/self-care; responsibility/accountability; vocational skills; and financial literacy and behaviors.**

<sup>62</sup> Jones, M.I., & Lavalley, D. (2009). Exploring the life skills needs of British adolescent athletes. *Psychology of Sport and Exercise*, 10, 159-167.

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### **Daily living/self-care**

These skills include basics like cooking, cleaning, laundry, and household chores. Such skills are eminently teachable, and research shows that young people enrolled in youth development programs frequently develop strong skills in these areas.<sup>63</sup>

One research study found that daily living skills/self-care skills bolster both individual and social responsibility among adolescents.<sup>64</sup>

### **Responsibility/accountability**

Responsibility/accountability among high-functioning people is turned both inward and outward. When turned inward, it's called personal responsibility—and encompasses many of the daily living/self-care skills described above. When turned outward, it becomes social responsibility—caring for the greater whole. Studies have shown that youth development organizations like 4H develop personal and social responsibility in young children and adolescents.<sup>65</sup>

### **Vocational skills**

We define vocational skills as those that enhance one's

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63        *Ibid.*

64        Bowes, J. M., Flanagan, C., & Taylor, A. J. (2001). Adolescents' ideas about individual and social responsibility in relation to children's household work: Some international comparisons. *International Journal of Behavioral Development*, 25(1), 60-68. doi:10.1080/01650250042000032

65        Fox, J., Schroeder, D., & Lodl, K. (2003). Life skill development through 4-H clubs: The perspective of 4-H alumni. *Journal of Extension*, 41(6).

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success in the world of work. These include a variety of tangible, marketable skills, as well as teamwork, and self-motivation. Once again, research demonstrates that participation in youth development programs, as well as in career education classes, measurably increases youths' vocational skills.<sup>66</sup>

### **Financial literacy and behaviors**

You may well be asking what financial literacy has to do with Health & Wellbeing. We refer you back to our definition of Health & Wellbeing education at the start of this chapter: "It helps children internalize the life skills needed to be a productive and functioning member of society." Financial literacy is one of those life skills.

Financial literacy and behaviors help young people understand financial choices, plan rationally for the future, respond competently to life events that affect everyday financial commitments, and discuss money and financial issues without (or despite) discomfort. Parent financial behaviors, work experiences while in school, and formal education and training in these areas all have major impacts on children's financial behaviors as adults.

A variety of experiences can help shape children's financial

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66 Kemple, J.J., & Willner, C.J. (2008). *Career Academies: Long-term impacts on labor market outcomes, educational attainment, and transitions to adulthood*. New York: Manpower Demonstration Research Corporation.

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literacy and management behaviors. Participation in youth development organizations, parental financial guidance, work experiences in adolescence, and educational experiences in school help develop children's financial behaviors (e.g., record keeping, staying on budget, and saving money for future schooling) and financial literacy.<sup>67</sup>

Building financial literacy can and should begin in childhood, and engagement in everyday parenting behaviors provides opportunities for financial socialization.

## Community Engagement Subdomains: The Research Basis

### *Engagement experiences*

Working with others is an important element of becoming a fully engaged community member. The development of skills necessary to participate and serve are critical components of civic competence. And to develop these skills, one must experience engagement in one's community in a variety of situations.

Engagement experiences include what we refer to as **conventional** and **unconventional** civic engagement, as well as **community service and volunteering**, and **service learning**.

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67 Alwell, M., & Cobb, B. (2009). Functional life skills curricular interventions for youth with disabilities: A systematic review. *Career Developmental for Exceptional Individuals*, 32(2), 82-93. doi: 10.1177/0885728809336656.

## **Conventional civic engagement**

Conventional civic engagement consists of those practices and actions we typically associate with being an engaged citizen: voting, volunteering, and participating in political and civic organizations like neighborhood associations and student government. Children from families that hold political conversations at home are more likely to vote as adults. High school students who join political groups are more likely to vote and volunteer later in life.<sup>68</sup>

Education plays a key role in engagement: high-quality civics education in high school has been shown to lead to higher rates of civic engagement.<sup>69</sup>

Civic engagement varies by gender and socioeconomic status. Girls are more likely to volunteer than boys, and adolescents from advantaged backgrounds are more likely to volunteer than their counterparts from less advantaged homes.<sup>70</sup>

## **Unconventional civic engagement**

This includes activities like protesting, boycotting, “procotting” (buying products from companies whose values you support),

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68 Andolina, M.W., Jenkins, K., Zukin, C., & Keeter, S. (2003). Habits from home, lessons from school: Influences on youth civic engagement. *Political Science & Politics*, 36(2), 275-280.

69 Center for Information & Research on Civic Learning & Engagement. (2013). What do young adults know about politics? Evidence from a national survey conducted after the 2012 election. Retrieved on February 28, 2013 from: <http://www.civicyouth.org/wp-content/uploads/2013/01/What-Young-Adults-Know-Fact-Sheet-20131.pdf>

70 Vieno, A., Nation, M., Perkins, D.D., & Santinello, M. (2007). Civic participation and the development of adolescent behavior problems. *Journal of Community Psychology*, 35(6), 761-777.



and consumer activism.

Teens who read news from social media platforms like Facebook are more likely to become civically engaged, in part, because the stories they read initiate further discussion with parents and friends.<sup>71</sup>

People who are engaged in their community in other ways (volunteering, for example) are more likely to be involved in

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71 Lenzi, D., Trentini, C., Tambelli, R., & Pantano, P. (2015). Neural basis of attachment-caregiving systems interaction: Insights from neuroimaging studies. *Frontiers in Psychology*, 6. doi:10.3389/fpsyg.2015.01241

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unconventional civic engagement than their peers.<sup>72</sup>

### **Community service and volunteering**

The National Service-Learning Clearinghouse defines service as “volunteering for the sake of meeting the needs of others or the community.” Volunteering is any activity in which time is given freely to benefit another person, group, or organization. Both community service and volunteering increase self-awareness and self-esteem, access to social networks, and an ongoing commitment to civic engagement.<sup>73</sup>

Based on evidence from two large, nationally-representative datasets, participation in youth organizations is associated with later political participation (i.e., voting) above and beyond family background characteristics.<sup>74</sup> On the other hand, lack of participation in youth organizations is associated with lower levels of political participation later in life.

### **Service learning**

Service learning is a learning experience during which students participate in organized service that not only addresses

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72 Metz, E.C., & Youniss, J. (2005). Longitudinal gains in civic development through school-based required service. *Political Psychology*, 26(3), 413-437. doi: 10.1111/j.1467-9221.2005.00424.x

73 Schmidt, J.A., Shumow, L., & Kackar, H.Z. (2012). Associations of participation in service activities with academic, behavioral, and civic outcomes of adolescents at varying risk levels. *Journal of Youth and Adolescence*, 41(7), 932-947.

74 Mcfarland, D. A., & Thomas, R. J. (2006). Bowling Young: How Youth Voluntary Associations Influence Adult Political Participation. *American Sociological Review*, 71(3), 401-425. doi:10.1177/000312240607100303

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the needs of a community, and promotes students' civic responsibility. Incorporated into the curricula, it provides structured opportunities for students to reflect on their experiences during the service activity.

Service learning is positively associated with cognitive development, especially improved critical thinking, academic outcomes, and thinking about a future career.<sup>75</sup>

### *Tools for engagement*

To be fully engaged in one's community, be it large or small, one must develop certain skills, knowledge, beliefs, and values. This is what Compositive refers to as tools for engagement.

The tools we will briefly describe here are engagement/civic skills, engagement beliefs and values, civic knowledge, and interpersonal competencies for engagement.

### **Engagement/civic skills**

These are the skills necessary for taking effective civic action. They include organizational skills, communication skills, collective decision-making skills, and cognitive skills (like analyzing political information). Studies show that parents can play an important role in the development of civic skills; in one study,

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75 Taylor, T. P., & Pancer, S. M. (2007). Community Service Experiences and Commitment to Volunteering. *Journal of Applied Social Psychology*, 37(2), 320-345. doi:10.1111/j.0021-9029.2007.00162.x

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political discussions with parents predicted children's news monitoring and communication skills.<sup>76</sup>

### **Engagement beliefs and values**

Engagement beliefs and values encompass beliefs and attitudes regarding political efficacy—whether an individual believes he can affect positive change—and beliefs about the future, social trust and trust in the American promise, trustworthiness of media and elected officials, and the belief that government responds to and works for ordinary people.

Education and service opportunities play a significant role in students' beliefs about their ability to affect public life. Demographic characteristics of youth and their parents have a major impact on beliefs about the trustworthiness of the media and social trust.<sup>77</sup>

### **Civic knowledge**

Civic knowledge encompasses knowledge about the political system, and knowing how to acquire such knowledge. Youth with high degrees of civic knowledge, or whose parents possess such knowledge, show increased levels of social tolerance and

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76 McIntosh, H., Hart, D., & Youniss, J. (2007). The influences of family political discussions on youth civic development: Which parenting qualities matter? *Political Science and Politics*, 40, 495-499. doi: 10.1017/S1049096507070758.

77 Flanagan, C. A., & Gallay, L. (2008, September). Adolescent development of trust (CIRCLE Working Paper 61). College Park, MD: Center for Information and Research on Civic Learning and Engagement.

### Whole Education - Compositive

civic engagement.<sup>78</sup> By civic engagement we mean, among other things, regular voting and engagement in the community through volunteer activities and attending meetings on important issues.

### **Interpersonal competencies for engagement**

Interpersonal competencies and skills are critical for civic participation. Leadership, teamwork, and cooperation, for example, are important for participating in groups, organizing groups, and making cooperative decisions.

Participation in programs that target civic engagement and service can lead to increases in important interpersonal skills, such as listening to opponents and respectfully disagreeing with others, that are necessary to later participation in civic activities and organizations.

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<sup>78</sup> Flanagan, C.A., & Faison, N. (2001). Youth civic development: Implications for research for social policy and programs. *Social Policy Report*, 15 (1), 3-15.

## Appendix II

### Capacities and Domains: Putting it All Together

As you've learned from reading this short book, the Compositive model rests on the belief that the most meaningful education develops in children the capacities to Reflect & Learn, Recognize & Act, Care & Connect, and Engage & Serve. The most effective way to develop these capacities is to present learning opportunities that address Cognition, Character, and Health and Wellbeing, while promoting Community Engagement. In the best of circumstances, any learning experience hits two or more of these domains simultaneously rather than in isolation.

How do each of the four capacities touch on each of the four domains? Here are some quick illustrations.

## Reflect & Learn and the Four Domains

### *Reflect & Learn and Cognition*

To Reflect & Learn is to spark Cognition in a multitude of ways. For example:

- Reflection is essential to the cognitive skill of problem-solving, as problem-solvers must be able to explore potential solutions and plan their strategies.

- Reflection also plays a key role in the cognitive skill of critical thinking, especially considering likely outcomes, hypothesis testing, synthesizing, and drawing inferences.<sup>79</sup>

- And reflection is in many ways the essence of the cognitive skill of executive functioning, which we define as organizing thoughts, engagement and evaluation of one's thinking strategies.

### **Reflect & Learn and Character**

Reflecting and Learning is closely related to Character as well. Authentic character education places heavy emphasis on moral characteristics, including social-emotional abilities and spirituality, and performance characteristics including creativity and curiosity. Here are some research findings on this topic:

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<sup>79</sup> Halpern, D.F. (2006). The nature and nurture of critical thinking. In R. Sternberg, R. Roediger, & D.F., Halpern (Eds.). *Critical thinking in Psychology* (pp. 1-14). Cambridge, MA: Cambridge University Press.



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- Social-emotional learning develops skills needed for effective and ethical relationships and work. These skills include recognizing emotions in others and making responsible decisions. Research has linked improvements in social and emotional skills with improvements in academic outcomes in both the short- and long-term.<sup>80</sup> In other words, an emphasis on social-emotional learning makes students better academic performers.

- Finding meaning in life, an important aspect of spirituality, grows out of deep, ongoing reflection.
- Creativity and curiosity are inextricably linked to reflecting and learning, as discussed further below.

## Reflect & Learn and Health & Wellbeing

Education that stresses Health & Wellbeing promotes healthy behaviors and life skills related to self-care. For a child, learning how to treat the irreplaceable treasure of his or her body well requires ongoing learning and reflecting.

- There is a growing body of research that shows children learn best and most deeply while physically active, or at the very least when they have frequent breaks during a school day during which they can expend some physical energy.<sup>81</sup> Researchers

<sup>80</sup> Malecki, C. K., & Elliot, S. N. (2002). Childrens social behaviors as predictors of academic achievement: A longitudinal analysis. *School Psychology Quarterly*, 17(1), 1-23. doi:10.1521/scpq.17.1.1.19902

<sup>81</sup> Kibbe, D. L., Hackett, J., Hurley, M., Mcfarland, A., Schubert, K. G., Schultz, A., & Harris, S. (2011). Ten Years of TAKE 10!®: Integrating physical activity with academic concepts

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reviewed evidence on Take 10!®, a program that integrates physical activity in the elementary school classroom, and found that program participants had higher levels of physical activity, lower levels of time-off-task, and greater academic outcomes (e.g., better math, reading, and spelling scores) than their peers who did not participate. The program may also reduce BMI among elementary school participants.<sup>82</sup>

- Sleep is another essential component of self-care. Children can engage in more complex thought processes (including reflection) when they get a good night's sleep. Research show that children with earlier bedtimes on school nights have higher levels of academic achievement.<sup>83</sup>

- On the negative side, research has found that dental problems in particular can affect a child's ability to pay attention in school.<sup>84</sup>

### Reflect & Learn and Community Engagement

Nowhere is the developing ability to reflect and learn more evident than in a child's growing connection to and engagement with the broader world outside their home and school environ-

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in elementary school classrooms. *Preventive Medicine*, 52. doi:10.1016/j.ypmed.2011.01.025  
82      *Ibid.*

83      Wolfson, A.R., & Carskadon, M.A. (1998). Sleep schedules and daytime functioning in adolescents. *Child Development*, 69(4), 875-887.

84      US Department of Health and Human Services (2000). *Oral Health in America: A Report of the Surgeon General- Executive Summary*. Rockville, MD: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health.



ments. A child can have fully internalized all components of Cognition, Character, and Health & Wellbeing and yet will remain unfulfilled unless she has ample opportunities to offer her skills and wisdom to the world.

Here are some ways in which reflecting and learning help a child connect.

- Getting your child engaged at a young age in civic organi-

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zations helps him learn what engagement looks and feels like. This increases the likelihood that he will integrate civic involvement into his identity development, and will stay engaged in his adult years.<sup>85</sup>

- Participating in meaningful, non-superficial, school-based service learning activities is an excellent way to develop a child primed for Community Engagement.

- Reflection exercises are a key piece of high-quality service learning activities that enhance students' understanding of social issues. Research shows that discussions and reflective writing leads to greater levels of understanding of social issues among participants.<sup>86</sup>

## ***Recognize & Act and the Four Domains***

Developing the ability to Recognize & Act also influences cognitive development, according to a wide range of academic research.<sup>87</sup> Recognizing and acting are important components of problem-solving, critical thinking, and executive functioning.

Recognition is based in large part on observation.

Researchers have found that someone who has learned by

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85       Youniss, J., McLellan, J., Yates, M. (1997). What we know about engendering civic identity. *The American Behavioral Scientist*, 40, 620-631.

86       Yorio, P.L., & Ye, F. (2012). A meta-analysis on the effects of service-learning on the social, personal, and cognitive outcomes of learning. *Academy of Management Learning & Education*, 11(1), 9-27. doi: <http://dx.doi.org/10.5465/amle.2010.0072>

87       Halpern, D.F. (2006). The nature and nurture of critical thinking. In R. Sternberg, R. Roediger, & D.F., Halpern (Eds.). *Critical thinking in Psychology* (pp. 1-14). Cambridge, MA: Cambridge University Press.

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observing a lesson or model exhibits new behaviors or understandings based on those observations.<sup>88</sup>

Acting based on such observational learning involves human agency. Agency has four components: intentionality, forethought, self-reactiveness, and self-reflectiveness.<sup>89</sup>

Intentionality means developing plans for behavior, and strategies to execute those plans.

Forethought is developing future plans and visualizing and anticipating possible outcomes. Ultimately, forethought motivates behavior.

Self-reactiveness refers to activities directed toward the self that monitor and regulate the execution of behavior.

Finally, self-reflectiveness refers to a self-awareness of one's behavior, intentions, meaning, and self-efficacy.

If that seems a bit complex, trying thinking of it instead in these more basic terms: taken together, the abilities to recognize and act enable a child to apply knowledge they acquire and patterns they've observed in new settings or contexts, and in an intentional, well-thought-out way. It's a cognitive skill of the highest order to recognize structures that can be replicated or changed based on context.

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88 Zelazo, P. D., Carter, A., Resnick, J. S., & Frye, D. (1997). Early Development of Executive Function: A Problem-Solving Framework. *Review of General Psychology*, 1(2), 198-226.

89 Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44, 1175-1184.

## **Recognize & Act and Cognition**

As described above, the ability to Recognize and Act is underpinned by the development of several key cognitive skills, including problem-solving, critical thinking, and executive functioning. In addition, this capacity engages Cognition by:

- Developing visual-spatial skills, which are defined as “capacities to perceive the visual-spatial world accurately and to perform transformations on one’s initial perceptions.”<sup>90</sup>
- Developing high-level verbal skills, which help young adolescents share decision-making with their parents.<sup>91</sup>

## **Recognize & Act and Character**

We’ve already discussed how the capacity to Recognize & Act helps develop the soft skill of empathy, a key component of Character. But it does more than that to develop Character:

- Accurate self-assessment should lead to a sense of humility, which in turn elevates one’s ability to act.<sup>92</sup>
- Believing that you can make a difference in the world, or, to use education jargon, have agency. Individuals who have developed the capacity to act believe in their ability effect change. They also have growth mindsets, which means they as

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90 Gardner, H., & Hatch, T. (1989). Multiple intelligences go to school: Educational implications of theory of multiple intelligence. *Educational Researcher*, 18(8), 4-10.

91 Romich, J.L., Lundberg, S., & Tsang, K.P. (2009). Independence giving or autonomy taking? Childhood predictors of decision-sharing patterns between young adolescents and parents. *Journal of Research on Adolescence*, 19(4), 587-600.

92 Tangney, J.P. (2000). Humility: Theoretical perspectives, empirical findings and directions for future research. *Journal of Social and Clinical Psychology*, 19(1), 70-82.

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individuals believe that they can improve their abilities and skills through effort.<sup>93</sup>

### **Recognize & Act and Health & Wellbeing**

To Recognize & Act in the context of one's Health & Well-being is both to learn how to take care of one's self from a positive perspective—e.g. physical fitness, and basic, daily self care, as well as avoiding negative and risky behaviors like alcohol and drug abuse.

- Being able to Recognize & Act leads to self-efficacy, which in turn leads to many positive outcomes in terms of physical and mental health (as well as better academic performance).<sup>94</sup>

### **Recognize & Act and Community Engagement**

Become engaged in the broader world means acting upon one's beliefs to help better one's community, be that on a micro or more macro level. Community Engagement promotes deeper learning than what typically occurs in a classroom alone. The capacity to Recognize & Act promotes this kind of deeper engagement in the following ways, among others:

- Young people who become active in civic or political organizations or efforts are more likely to remain active and engaged

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93 Dweck, C. S. (2006). *Mindset: The New Psychology of Success*. The Random House Publishing Group.

94 Nash, S.G., McQueen, A., & Bray, J.H. (2005). Pathways to adolescent alcohol use: Family environment, peer influence, and parental expectations. *Journal of Adolescent Health*, 37, 19-28. doi:10.1016/j.jadohealth.2004.06.004.

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later in life.<sup>95</sup>

- Participating in community service outside school or service learning through school promotes activism later in life as well.<sup>96</sup>

It's also important to note that parents can promote a child's sense of connection and desire to act by discussing politics and current events around the dinner table, and creating a family culture that values staying abreast of current events at a local, national, and global level.

## *Care & Connect and the Four Domains*

### **Care & Connect and Cognition**

Researchers have found that the strongest links between cognition and caring and connecting are forged in group learning activities, particularly those that place an emphasis on creative expression.

- One study found that drama lessons in particular improves social interactions—a sense of connectedness—among children of varying ages.<sup>97</sup>

- Another uncovered a link between musical aptitude and

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95 Andolina, M.W., Jenkins, K., Zukin, C., & Keeter, S. (2003). Habits from home, lessons from school: Influences on youth civic engagement. *Political Science & Politics*, 36(2), 275-280.

96 Barber, B.L., Eccles, J.S., & Stone, M.R. (2001). What happened to the jock, the brain, and the princess?: Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research*, 16(5), 429-455.

97 Schellenberg, E.G. (2005). Music lessons enhance IQ. *Psychological Science*, 15, 511-514. doi: 10.1111/j.0956-7976.2004.00711.x



the development of strong “interpersonal (knowledge and skills for social interactions) and intrapersonal (self-awareness and management of one’s own emotions) ” intelligence.<sup>98</sup>

### **Care & Connect and Character**

Links between caring and connecting and Character are obvious, and there is an abundance of research to back this up. Here a just a few examples:

- Among adolescents, outwardly-focused character strengths (e.g. forgiveness) are related to lower levels of depression because these strengths forge strong interpersonal connections.<sup>99</sup>

<sup>98</sup> Chan, D. W. (2003). Adjustment problems and multiple intelligences among gifted students in Hong Kong: The development of the revised student adjustment problems inventory. *High Ability Studies*, 14, 41–54.

<sup>99</sup> Gillham, J., Adams-Deutsch, Z., Werner, J., Reivich, K., Coulter-Heindl, V., Linkins, W.,

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- Children who are connected to their school community fare better on a number of outcomes, including improved academic performance, motivation, and self-esteem and fewer psychological problems like depression, anxiety, and delinquency.<sup>100</sup>
- High-quality familial relationships and certain parenting styles (e.g., parenting characterized by warmth, involvement, and expectations and relationships) and relationships with adult relatives and older siblings are associated with resilience.<sup>101</sup>

## Care & Connect and Health & Wellbeing

Strong, caring relationships with family and peers help children and adolescents steer clear of risky behaviors, and help them learn how to set positive goals for their future.

- Research has found links between a positive family environment (characterized by parental monitoring and acceptance) and fewer friends and peers who drink alcohol. A positive family environment also helped young people have better confidence in their ability to refuse alcohol.<sup>102</sup>

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Winder, B., Peterson, C., Park, N., Abenavoli, R., Contero, A., & Seligman, M.E.P. (2011). Character strengths predict subjective well-being during adolescence. *Journal of Positive Psychology*, 6(1), 31-44. doi: 10.1080/17439760.2010.536773.

100 Anderman, L. H., & Freeman, T. M. (2004). Students' sense of belonging in school. In P. R. Pintrich & M. L. Maehr (Eds.), *Advances in motivation and achievement* (Vol. 13, pp. 27-63). Oxford, England: Elsevier.

101 Masten, A. S., & Powell, J. L. (2003). A resilience framework for research, policy, and practice. In S.S. Luthar (Ed.), *Resilience and vulnerabilities: Adaptation in the context of childhood adversities* (pp. 1-25). New York: Cambridge University Press.

102 Nash, S.G., McQueen, A., & Bray, J.H. (2005). Pathways to adolescent alcohol use: Family environment, peer influence, and parental expectations. *Journal of Adolescent Health*, 37, 19-28. doi:10.1016/j.jadohealth.2004.06.004

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- Also, life skills programs taught by peers can help children learn about goal-setting and problem-solving strategies, in particular how to utilize social support to avoid peer pressure to engage in risky behaviors.<sup>103</sup>

### Care & Connect and Community Engagement

It's easy to see a logical progression from learning to care for one's self, to caring for others, to connecting in meaningful ways to your immediate community, to connecting in a more global sense with issues and movements that align with your values. Here are some examples of research studies that validate this connection:

- Youth who experience higher social support and parental involvement are more likely to be involved in community activities, either political or non-political in nature.<sup>104</sup>
- Teens who participate in service activities, as opposed to activities like hanging out with friends, have higher rates of connections to networks of adults, social capital, and positive relationship experiences.<sup>105</sup>
- Being in a classroom that is a caring community, and

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103 Forneris, T., Danish, S.J., & Scott, D.L. (2007). Setting goals, solving problems, and seeking social support: Developing adolescents' abilities through a life skills program. *Adolescence*, 42(165), 103- 114.

104 Pancer, S.M., Pratt, M., Hunsberger, B., & Alisar, S. (2007). Community and political involvement in adolescence: What distinguishes the activists from the uninvolved? *Journal of Community Psychology*, 35 (6), 741-759.

105 Larson, R.W., Hansen, D.M., & Moneta, G. (2006). Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology*, 42(5), 849-863. doi: 10.1037/0012-1649.42.5.849

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feeling connected to school, is linked with higher levels of social trust, trust in the media, trust in the American promise, and trust in elected officials, as well as trust that the government responds to ordinary people.<sup>106</sup>

## *Engage & Serve and the Four Domains*

### **Engage & Serve and Cognition**

People are engaged when their basic needs and desires are satisfied by the activities and people with whom they interact.<sup>107</sup> Since doing meaningful work with and for others helps define our humanity, serving others in a tangible way, whether individually or collectively, leads to deeper engagement in the endeavor.

### **Engage & Serve and Character**

Character recognizes authenticity. Incorporating character into authentic engagement and service happens almost automatically. Here are some research citations that explain this further:

- Social intelligence helps develop skills, like cooperation,

that are an essential component of the capacity to serve.<sup>108</sup>

106 Flanagan, C. A., & Gallay, L. (2008, September). Adolescent development of trust (CIRCLE Working Paper 61). College Park, MD: Center for Information and Research on Civic Learning and Engagement.

107 Skinner, E. A., & Pitzer, J. (2012). Developmental dynamics of engagement, coping, and everyday resilience. In S. L. Christenson, A.L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 21-44). New York: Springer Science

108 Park, N., & Peterson, C. (2006). Moral competence and character strengths among adolescents: The development and validation of the Values in Action Inventory of Strengths for

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- Developing a sense of gratitude strengthens abilities related to the capacity to serve, such as cooperation and social skills, as well as conscientiousness.<sup>109</sup>

- Having a sense of purpose in life is essential to developing the capacity to serve, and at the same time, developing the capacity to serve strengthens one's sense of purpose in life.<sup>110</sup>



## Engage & Serve and the Health & Wellbeing

Engaging and serving are inherently healthful undertakings. Developing this capacity strengthens mental and physical health, and leads to the establishment of healthy relationships and high self-esteem.

- Belonging to a group creates emotional and behavioral engagement, both of which are linked to lower levels of mental health problems.<sup>111</sup>

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Youth. Journal of Adolescence, 29, 891-909

109      ibid.

110      Damon , W. Menon , J. Bronk , K. C. (2003). The development of purpose during adolescence. Applied Developmental Science, 7, 119-128.

111      Newman, B.M., Lohman, B.J., & Newman, P. R. (2007). Peer group membership and

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- Developing the capacity to Engage & Serve can begin early, with activities as simple as household chores, which is also directly connected to the Health & Wellbeing attribute of life skills. Household chores can begin to foster personal and social responsibility, which are related to the capacity to serve.<sup>112</sup>
- Participation in sport-based life skills programs can develop social responsibility, knowledge about goals, and concern for others among participants, all critical components of the capacity to Engage & Serve.

### Engage & Serve and Community Engagement

The ties between this capacity and this domain are so close that enumerating them almost seems redundant. To Engage & Serve **is** to be engaged in one's community. Here are a few research citations that make this case:

- Participation in organizations, and civic engagement more generally, helps teens learn the skills and knowledge to stay civically engaged later in life.<sup>113</sup>
- When youth who have little interest in service and civics participate in community service, they are more likely to be civi-

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a sense of belonging: Their relationship to adolescent behavior problems. *Adolescence*, 42, 241-263

112 Bowes, J.M., Flanagan, C., & Taylor, A.J. (2001). Adolescents' ideas about individual and social responsibility in relation to children's household work: Some international comparisons. *International Journal of Behavioral Development*, 25(1), 60-68. doi: 10.1080/01650250042000032.

113 Youniss, J., McLellan, J., Yates, M. (1997). What we know about engendering civic identity. *The American Behavioral Scientist*, 40, 620-631

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cally engaged in the future.<sup>114</sup>

- Teens who participate in service activities compared to other extracurricular activities are more likely to experience teamwork, positive connections, and exposure to adult networks.<sup>115</sup>
- Among youth who complete school-based required community service that involves interaction with people in need, there is an increased likelihood of later civic involvement and service.<sup>116</sup>

Now that you've learned about the Compositive domains, you should have a solid sense of what we're about. We have spent several years compiling research, meeting with experts, and discussing among ourselves the components of a Whole Education.

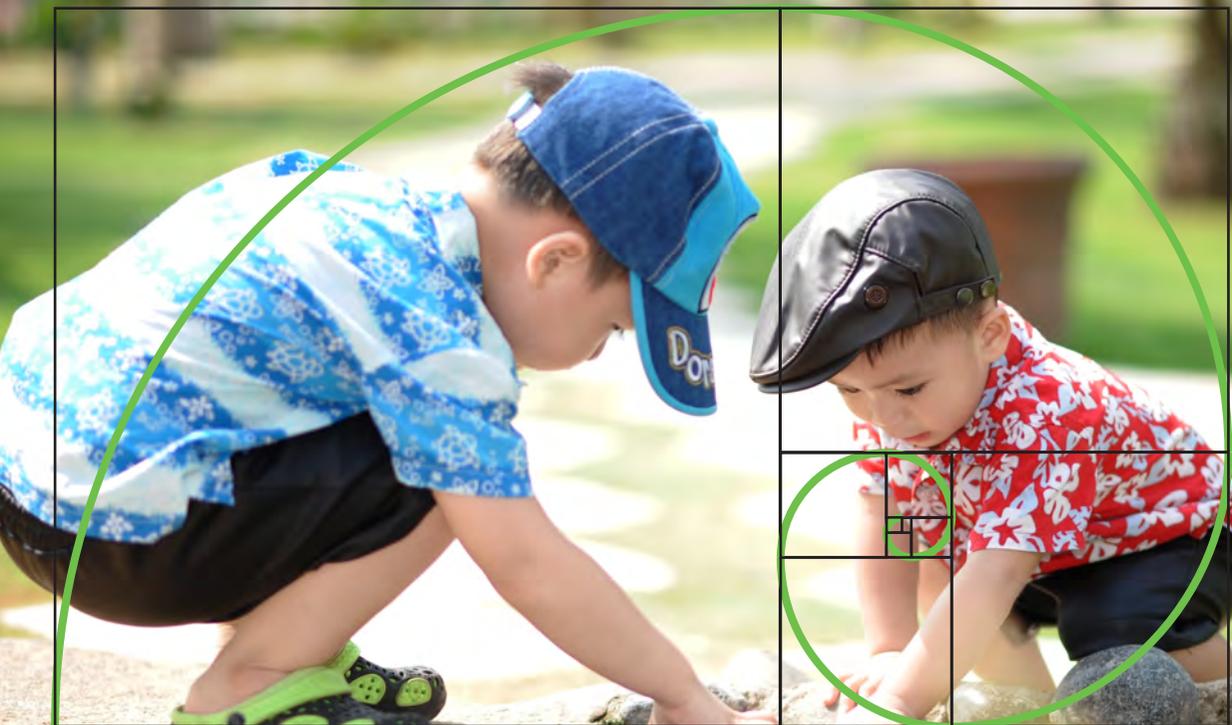
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114 Metz, E.C., & Youniss, J. (2005). Longitudinal gains in civic development through school-based required service. *Political Psychology*, 26(3), 413-437. doi: 10.1111/j.1467-9221.2005.00424.x

115 Larson, R., Hansen, D., & Moneta, G. (2006). Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology*, 42(5), 849-863.

116 Reinders, H., & Youniss, J. (2006). School-based required community service and civic development in adolescents. *Applied Developmental Science*, 10(1), 2-12

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As parents, we all want to raise children who go on to lead rich, fulfilling lives filled with healthy, loving relationships and meaningful work. We also want our children to have a passion for making positive contributions to their wider and more local community. Ultimately, we hope our children strive to leave the world a more just, peaceful place than they found it.

Inside these pages, you'll learn about Whole Education, the Compositive approach to helping all children become active and engaged citizens. It is a vision of the education every child deserves, and it is soon to form the foundation of a new, break-the-mold school.