THE BRILLIANT STAR FRAMEWORK

1

The Brilliant Star Framework[1]

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Parents, educators, and concerned citizens around the world are asking questions about how best to prepare children and youth for successful adulthood in the twenty-first century. The issue takes on added importance because humanity is immersed in a social and cultural environment that is changing at an accelerating rate (Kurzweil, 2001). Simultaneously, there is exponential growth in the understanding of human capacities and the potential for human development (Damon, 2004). Though every human society has dealt with issues of preparing children and youth for adulthood, the potential benefits have never been greater for providing the proper learning experiences so that young people flourish as adults.

While it is acknowledged that schools are not the only social institutions responsible for the education of children and youth (Huitt, 2012a), schools are where most will engage in formal, systematic learning experiences rather than the informal and sometimes conflicting learning experiences provided by the home, community, and larger society (Wikeley, Bullock, Muschamp, & Ridge, 2007). Focusing on schools as a means for preparing young people for adulthood is one of the hallmarks of developed countries (The National Commission on Excellence in Education, 1983). On the other hand, when positive connections are made between home, school, and community, the impact can be even more powerful (Epstein & Sanders, 2000; Henderson & Mapp, 2002; Roehlkepartain, Benson, & Sesma, 2003).

A new vision for educating children and youth, both formally and informally, is required if they are to become successful adults in the twenty-first century. Exactly what that means needs to be considered and plans need to be made and implemented (Partnership for 21st Century Skills, 2004; Tate, 2008). This requires the ability to think beyond the actual to the possible through the use of imagination. Liu and Noppe-Brandon (2009) make an excellent point that the use of imagination is the first step towards developing creative solutions to seemingly intractable challenges. It is then necessary to develop innovative products and services that can be used to meet those challenges.

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The purpose of this chapter is to provide an overview of research describing innate capacities of human beings that can be actualized through directed school-based experiences and to review the types of curricula, learning experiences, and potential accountability procedures that educators can use to do so. More detailed information will be provided in later chapters. This information is also important to parents and community members who want to facilitate development of a broad range of knowledge, attitudes, and skills related to successful development (Bushaw & Gallup, 2008; Elam, Rose, & Gallup, 1992; Gallup, 1975.) It is intended that readers will be stimulated to provide more of the types of experiences that will allow children and youth to prepare for the challenging times they will face as adults.

Identifying Capacities

The first step in the identification of potential capacities that could be developed via guided learning experiences was to investigate human capacities considered to be intelligences as these refer to an ability or aptitude for learning. A second step was then to investigate whether available research showed that the movement from capacity to competence (ie, an actualized capacity) could be facilitated through guided learning experiences.

Perhaps the most widely accepted approach to identifying a variety of human capacities is Gardner's (1983, 2006) work on multiple intelligences. He initially identified seven intelligences. Three of the intelligences have been labeled Symbol Analytic in that they involve making a conversion from a symbol to a higher-level mental code (ie, *linguistic*—translating letters and words into knowledge and concepts; *logical-mathematical*—converting numbers to quantitative concepts and to think rationally and/or logically; *musical*—translating written musical symbols in timbre, pitch, and rhythm). Two of Gardner's intelligences are considered Personal intelligences in that they are oriented to the person (*intrapersonal*—knowledge of one's self and *interpersonal*—knowledge of others, especially their moods and motivations). Finally, two additional intelligences might be considered as Object-oriented intelligences (*spatial*—the ability to mentally rotate an object in space and *bodily-kinesthetic*—the ability to control one's body and handle objects skillfully).

Gardner (1999) later identified an eighth intelligence which he labeled *naturalist* (an Object-oriented intelligence). He defined this as an ability to discern differences in one's natural surroundings. A ninth intelligence, labeled *existential* (a Transpersonal intelligence) is still under consideration. It involves the ability to search for and connect with universal unknowns.

In the process of investigating other research that might confirm the concept of multiple intelligences, eight domains were identified separately by

a variety of researchers: (1) self, including temperament, personality, and self-views, (2) cognition/thinking, (3) affect/emotion, (4) conation/volition, (5) physical/bodily-kinesthetic, (6) social/interpersonal; (7) spiritual/ transpersonal, and (8) moral character. Interestingly, five of these relate to terms used by the ancient Greeks to describe different aspects of a human being: body (bodily-kinesthetic), mind (cognition/thinking, affect/emotion, and conation/volition), and soul/spirit. These relatively intrinsic domains are used extrinsically in social interactions, while moral character focuses on issues of right and wrong and the concept of self is considered in terms of how the other domains are holistically integrated and organized.

Figure 1-1. Becoming a Brilliant Star Framework
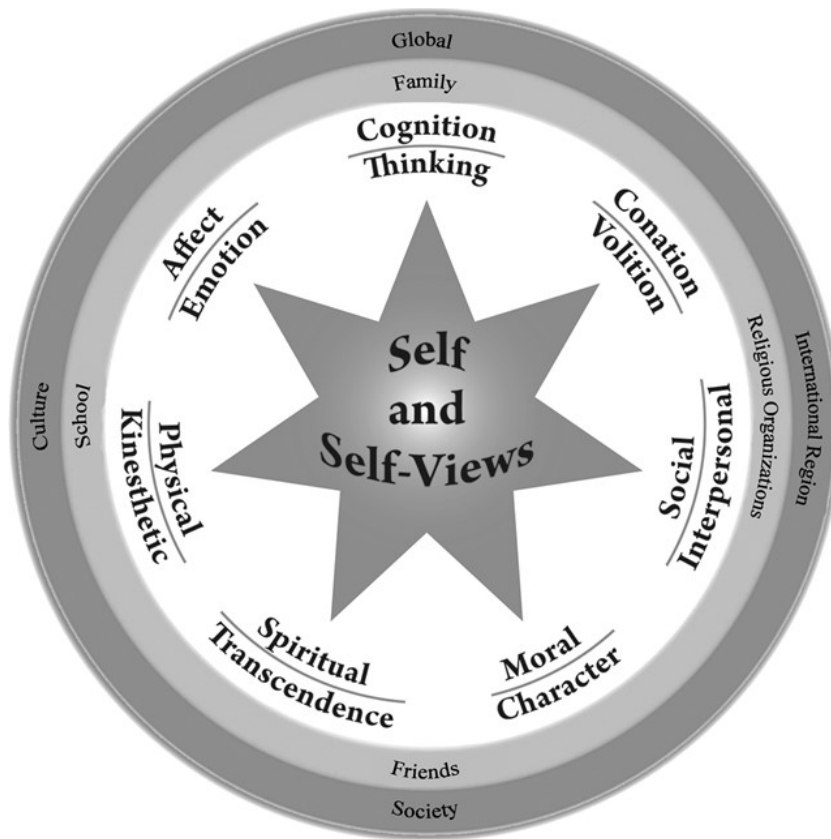
There is considerable overlap between Gardner's (1999, 2006) list of multiple intelligences and the list of intelligences identified separately by others whose research will be discussed below. For example, both lists

contain bodily-kinesthetic, social/interpersonal, existential/spiritual, and self/intrapersonal. The domain of cognition/thinking is represented in Gardner's work as a combination of linguistic and logical-mathematical intelligences. However, Gardner does not identify intelligences linked with the domains of affective/emotion, volition/conation, and morality. Likewise, spatial, musical, and naturalistic intelligences are not considered as intelligences by other researchers.

The domains might be considered as points on a star with the self and self-views central to the image (see Figure 1-1). This is a revision of the Becoming a Brilliant Star framework previously developed (Huitt, 2006a). It shows that the domains are developed within a multi-level sociocultural context where family, school, religious organizations, and friends, as well as the connections among them, provide the most direct influence on one's development.

The remaining sections will briefly review capacities represented by these eight intelligences. Discussed first is cognition and thinking, as that is the dominant domain used for identifying the capacity to do well in school through developing academic competence. Next considered are the other two faculties of the mind, affect or emotion and conation or volition (currently discussed primarily in research on agency and self-regulation). The domains of physical or bodily-kinesthetic intelligence, social intelligence, spiritual intelligence, and moral intelligence will then be discussed. Finally, different ideas regarding the development of the knowledge of one's self or intrapersonal intelligence will be considered.

Cognitive Intelligence

While many view cognitive intelligence as inherently fixed (Jensen, 2002), other researchers have demonstrated that learning experiences can impact cognitive processing skills and, therefore, one's ability to learn academic content. For example, Feuerstein and his colleagues (1979; Feuerstein, Rand, Hoffman, & Miller, 1980) showed that measured IQ can be increased through involvement in a two- to three-year program (titled *Instrumental Enrichment*) focused on modifying specific, though non-content related, cognitive processes. Ben-Hur (2000) reviewed research from seven separate studies demonstrating the effectiveness of the program. In general, students who completed the program were more organized in their thinking, more self-sufficient in their learning, and volunteered more in class.

Sternberg (1985, 1996) claimed that traditional measures of intelligence, developed to identify mental capacity related to academic competence, are limited. He identified three separate, though related, categories of cognitive abilities. The first he labeled *analytic*, where the individual uses strategies such as comparing and analyzing to investigate the elements and relationships of

an object or situation. The second he labeled *creative*, where the individual uses strategies such as imagining or designing to find different elements or connections to solve non-traditional problems or challenges. Sternberg labeled the third as *practical*, where the individual uses strategies to address problems or challenges as they occur in everyday contexts. Sternberg believed that one's individual profile of successful intelligence is comprised of one's competencies in each of these three areas. While one can have an inherited capacity for each of these types of intelligence, this is relatively less important than how these capacities are developed and used for personal success. Sternberg and his colleagues created specific programs and lessons that focus on the development of the skills related to the different components of successful intelligence (eg, Sternberg & Grigorenko, 2000; Sternberg et al., 2000; Williams, Blythe, Li, White, Sternberg, & Gardner, 1997; Williams, Markle, Brigockas, & Sternberg, 2002).

Wegener (2005) provided another rubric for considering the specific skills used in cognition and thinking. He primarily focused on Sternberg's (1985, 1996) analytic intelligence skills such as making associations, engaging in analysis, drawing implications, and describing correlational and causal relationships. However, he also identified the intellectual skill of synthesis, which is more related to the creative aspect of intelligence described by Sternberg. In all, he described twenty-two cognitive processing skills that provide the foundation for engaging in academic tasks. Most importantly, Wegener provided samples of lessons that can be used to address each of the skills he identifies.

Affective/Emotional Intelligence

Lewis, Haviland-Jones, and Barrett (2008) documented the resurgence of research on emotion and reported on the pervasive influence of emotions on human thinking and behavior. Work done by Salovey and Juneer (1990), and popularized by Goleman (1995), brought this domain to the attention of the public in a manner similar to the impact of work done on cognitive intelligence by Gardner (1983) and Sternberg (1985) a decade earlier.

Unfortunately, Goleman's conceptualization of emotional intelligence, which included a list of twenty-five potential competences, diluted the focus on emotion as only four directly related to other researchers' definitions (ie, the personal competencies of emotional awareness, accurate self-assessment, and self-confidence, and the social-emotional competence of understanding others' emotions.) Juneer and Salovey (1997) provided an update of the research on emotional intelligence, conceptualizing it as comprised of aptitudes in four categories: (1) the ability to perceive emotion; (2) the ability to use emotion to facilitate thought; (3) the ability to understand emotions; and (4) the ability to manage emotions.

Denham (1998), in an excellent overview for educators emphasizing the actualization of emotional intelligence, chose to ignore the component of influencing thought and focused on three aspects of emotional intelligence: (1) *emotional understanding* (of one's own emotions and those of others as well as the ability to relate the two); (2) *emotional expression* (how one uses verbal and nonverbal means to express emotion); and (3) *emotional regulation* (the ability to enhance or dampen one's emotions based one's circumstances.) Maurer, Brackett, and Plain (2004) suggested emotional understanding should be further unpacked into (a) recognizing emotions to obtain valuable information about the environment, (b) understanding how emotions influence attention, thinking, decisions, and behavior, and (c) labeling emotions to describe feelings precisely. This disagreement on a definition of emotional intelligence is only one of many issues that have yet to be resolved (Matthews, Emo, Roberts, & Zeidner, 2006; Matthews, Roberts, & Zeidner, 2004).

There are a number of authors who focused on classroom-based approaches to developing emotional competence. For example, Hyson (2003) and Saarni (1999, 2007) described activities for the early childhood level. Saarni provided an excellent review of research related to developing five emotional competencies: (1) awareness of one's own emotions and discernment of the emotions of others; (2) the capacity for connecting empathically with others; (3) understanding the difference between internal subjective feelings and external expressional expression; (4) self-management when coping with aversive emotions; and (5) awareness of emotional communication and self-regulation in relationships. Maurer et al. (2004) described a middle school program for developing emotional literacy. Additionally, several chapters in an edited volume by Bar-On, Maree, and Elias (2007) review research that schools, parents, and community organizations can use to impact emotional development.

A related area to the development of emotional competence is the issue of subjective well-being, which includes three components. Two are affective components defining everyday happiness (positive affect and negative affect); the third is a cognitive component describing one's overall satisfaction with one's life (Diener, 1984; Diener, Suh, Lucas, & Smith, 1999). Seligman (2002) concluded that there are actually three different orientations to happiness: (1) sensual pleasure (hedonic happiness); (2) engagement (flow, using one's character strengths in challenging situations), and (3) meaning (eudaimonic happiness). Peterson, Park, and Seligman (2005) showed that these orientations could be reliably measured. While a high score on any one of these orientations correlated well to life satisfaction, people with a high score on all three (what the researchers titled "living a full life") showed the highest levels of life satisfaction. Perhaps more importantly, a higher level of

meaning-related happiness had a larger effect size than did the other two in predicting life satisfaction.

In a related study, Park, Peterson, and Seligman (2004) found that strengths more related to the affective domain (ie, hope, zest, gratitude, love) and the conative domain (eg, curiosity, persistence, self-regulation) were increasingly likely to be associated with life satisfaction than were strengths more associated with the cognitive domain (eg, perspective/wisdom). Subsequently, Froh and his colleagues (Bono & Froh, 2009; Froh, Miller, & Snyder, 2007; Froh, Sefick, & Emmons, 2008) found that gratitude was a significant component of life satisfaction for adolescents and could be impacted through school-based interventions.

While there are noteworthy challenges to addressing emotional intelligence and emotional competence, including the various components of happiness, these issues continue to attract a great deal of attention. Perhaps that is because emotional development has been tied to cognitive functioning (Isen, 2008; Lazarus, 1999), conative development (Buckley & Saarni, 2009; Saarni, 1999), social development (Goleman, 2006), moral development (Hoffman, 2000), spiritual development (Guela, 2004), and the creation of self-views (Hamachek, 2000). Happiness has been related to outcomes such as higher income, more satisfying and longer marriages, more friends, better physical health, and living longer (Lyubomirsky, 2007). Lyubromirsky also reported research showing that individuals who identified themselves as happier were more creative, helpful, self-confident, and showed greater self-regulation and coping abilities.

One challenge for addressing emotional intelligence and happiness in school is research showing that early experiences, specifically in the home between the infant/child and primary caregiver, are especially important for proper emotional development (Cooper, Masi, & Vick, 2009: Stack, Serbin, Enns, Ruttle, & Barrieau, 2010; Yap, Allen, Leve, & Katz, 2008). A second challenge is that there are relatively few classroom-based programs that focus solely on developing students' emotional intelligence. Rather, focus on emotions is generally embedded in programs such as habits of mind (Costa & Kallick, 2008), social-emotional learning (Zins, Payton, Weissberg, & O'Brien, 2007), conflict resolution (Bodine & Crawford, 1999), or moral development (Narvaez, 2008b). These programs are discussed separately below.

Conative/Volitional Intelligence (Agency)

Central to the concept of conative intelligence is the use of personal agency or volition to use thoughts, emotions, and behaviors to make choices related to goal-directed activities. Although conation has been an area of study in psychology since its beginning as a scientific discipline (Hilgard,

1980), research on this domain, including research on will, volition, and self-regulation, has been fraught with controversy as it highlights discussions of human agency and whether or not it actually exists (Tallon, 1997). However, over the last century, Newton's paradigm of a closed, deterministic universe where human agency was perceived as non-existent gave way to a process ecology or adaptive systems paradigm where the universe, and especially humanity's interaction with it, is viewed as being open and indeterministic (Ulanowicz, 2009). This has led to a philosophical view of human capabilities that allows, even requires, conscious agency. The reappearance of an emphasis on human volition was assisted after a long absence when Wechler included a conative component in his widely-used intelligence measure (Cooper, 1997), Kolbe (1990) developed a reliable and valid measure of conation, and Goleman (1995) included conative components in his definition of emotional intelligence.

Bandura (1986, 1989, 2001a) has been one of the leading researchers in the study of human agency through his investigation of self-regulation. He identified four components that provide the foundation for one's self-regulatory capability: (1) intentionality—the ability to originate a purposeful action; (2) forethought—the ability to think about the future and to make plans; (3) self-reactiveness—the ability to monitor one's actions and make corrections to achieve one's goals; and (4) self-reflection—the ability to evaluate one's purpose, values, and goals with respect to one's plans and actions. Using Bandura's framework, Zimmerman (1998) developed a process approach to self-regulation that included three phases: (1) forethought, including setting goals and making plans; (2) performance, including the use of volition to put plans into action; and (3) self-reflection, including relating performance to goals and taking corrective action.

Huitt and Cain (Chapter 6, this volume) took a slightly different approach by focusing on the self-motivational components of conation, including proactively establishing and maintaining one's goal-directed actions, energizing one's self to action, and persevering in spite of setbacks or obstacles. Proactively establishing one's direction includes at least four sets of skills: (1) becoming aware of human needs in general as well as one's specific needs; (2) articulating a vision for one's life and forming a related statement of long-term desires or aspirations; (3) setting short-term goals related to long-term aspirations; and (4) making specific plans for taking action. Strategies must then be used to put plans into action and one must persevere to bring plans to fruition. Self-directed formative evaluation throughout the process allows one to make adjustments in attainment of goals.

As educators, businesses, and governmental agencies began to address the fast pace of social change, the importance of conative or self-regulation skills related to life-long learning became increasingly apparent (McCombs,

1991). Early research showed that students who scored high in self-regulation had set personal learning goals, engaged in accurate self-monitoring, and thought strategically about their learning activities (Schunk & Zimmerman, 1994). Summaries of research in this field showed that it is intricately linked to cognitive and affective processing (eg, Baumeister & Vohs, 2007; Boekaetrs, Pintrich, & Zeidner, 2000). However, it is distinctive in that it focuses on proactive, goal-directed behavior.

Other research showed that conative or self-regulation skills are significantly related to academic achievement in a wide variety of contexts (eg, Eshel & Kohavi, 2003; Joo, Bong, & Choi, 2000; Neber & Schommer-Aikins, 2002; Pajares & Graham, 1999) and can be modified through classroom experiences (eg, Debowski, Wood, & Bandura, 2001; Perels, Guertler, & Schmitz, 2005; Perry, 1999; Zimmerman, 2002). Additionally, researchers found that classroom teachers could be trained to provide instruction that enhanced student's self-regulation skills (Schunk & Zimmerman, 1994, 1998). Zimmerman and his colleagues published a how-to manual on developing students' self-regulation skills (Zimmerman, Bonner, & Kovach, 1996) and produced a classroom-based program that addressed these skills (Cleary & Zimmerman, 2004; Nelson, Cleary, & Platten, 2008).

Bodily-Kinesthetic or Physical Intelligence

Gardner (1983) stated that bodily-kinesthetic intelligence involves the ability to use the body to complete complex and/or intricate physical tasks. Blumenfeld-Jones (2009) defined bodily-kinesthetic intelligence as an ability to be aware of one's body in space and motion. Visser, Ashton, and Vernon (2008) showed that bodily-kinesthetic intelligence was often differentiated into two components: (1) gross motor ability (eg, extraordinary balance and co-ordination), and (2) fine motor ability (eg, dexterity). As bodily-kinesthetic intelligence is actualized into competence, there are also two categories: basic and advanced. Basic physical competence is often measured in terms of (1) cardiovascular endurance, (2) muscular strength, (3) muscular endurance, and (4) flexibility (Caldwell & Huitt, Chapter 8, this volume) while more advanced competencies are shown in such activities as dance, theatre, and sports (Visser et al., 2008).

Nutrition and physical exercise are the two primary influences on physical development, including health and well-being (Cooper, 1999). With respect to proper eating, a major challenge is that most adults have been taught incorrect information about eating and nutrition (Willett, Skerrett, & Giovannucci, 2001). It does not help that bookstores and magazines are full of competing advice on what and how to eat (Katz, 2005). Fortunately, researchers and practitioners such as Ornish (2007), Sisson (2013), and

Willett et al., (2001) are beginning to provide sound, scientifically-based recommendations on what and how much to eat. Likewise, chefs such as Cooper and Holmes (2006) and Oliver (2009; Smith, 2008) provide guidance in how to put these ideas into practice in schools and homes.

In order to use one's bodily-kinesthetic intelligence, one needs to have a healthy body. In the developed world, approximately two-thirds of adults and one-third of children are overweight (Daniels, Jacobson, McCrindle, Eckel, & Sanner, 2009; Lewis, McTigue, Burke, Poirier, Eckel, Howard…& Pi-Sunyer, 2009). Additionally, as global abundance increases, the epidemic of obesity is spreading rapidly to developing countries (Katz, 2005). Katz (2005) summarized data from the United States National Center for Health Statistics that showed the trends now in place forecast a "shorter life expectancy for children than for their parents" (p. 62).

In a meta-analysis of 21 studies, Cook-Cottone, Casey, Feeley, and Baran (2009) found that programs producing the best results in addressing obesity targeted elementary children, were whole-school oriented (did not just target overweight children), provided children with specific information and activities regarding healthy nutrition and exercise, and had a high level of parental support. This suggests that preventing weight problems is more effective than addressing problems that arise with older children and youth, that providing information and assistance to parents is as important as working with children, and that schools must target both nutrition and exercise while they have children in their care.

Caldwell and Huitt (Chapter 8, this volume) reported on the results of schools spending an increased amount of time attempting to improve academic test scores—a reduction in children's physical activity with a resulting decline in physical fitness and an increase in fitness-related illnesses. Eliminating or even reducing physical activity in schools does not acknowledge research showing that physical activity positively impacts school academic achievement (Trost, 2009). For schools who desire to promote physical competence, it can be done by connecting academic lessons to physical education activities (Huitt, 2009c), involving children and youth in dance, theatre, or sports, or through movement education (eg, Dobbins, DeCorby, Robeson, Hussen, & Tinlis, 2009; Ghassemi & Kern, 2014). Kogan (2004) created a movement education curriculum for elementary students; Carter, Wiecha, Peterson, Nobrega, and Gortmaker (2007) provided a similar approach for middle school students. While there can be specific advantages to having students involved in dance, theatre, sports, or movement education, the most important goal should be to have children and youth develop strong and healthy bodies so that they can use whatever bodily-kinesthetic intelligence they possess.

Social/Interpersonal Intelligence

Human beings are social in their very nature (Aronson, 2007). In fact, Dunbar (1998) hypothesized that the large human brain evolved primarily to adapt to an increasingly complex social environment. Albrecht (2005) and Goleman (2006) provided recent reviews of the literature on social intelligence; their conceptualizations of social intelligence offer an excellent introduction to this topic, even though they focused more on adults than children and adolescents.

As with other domains, there are difficulties with the definitions of social intelligence and social competence. Goleman (2006) identified two basic categories of social intelligence, each with four specific subcomponents: *Social Awareness* (primal empathy, attunement, empathetic accuracy, and social cognition) and *Social Facility* (synchrony, self-preservation, influence, and concern). The School Social Behavior Scales (SSBS), one of the most widely used assessment instruments for students in K-12 classrooms, is actually comprised of two scales: (1) the Social Competence Scale, and (2) the Antisocial Behavior Scale (Merrell, 1993). In turn, the Social Competence Scale is comprised of three sets of skills: (1) *interpersonal skills*, (2) *self-management skills*, and (3) *academic skills*.

The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2003, 2007), one of the leaders in the development of social-emotional learning (SEL), identified five teachable competencies that can provide a foundation for effective personal development:

1. *Self-awar*eness: knowing what one is feeling and thinking; having a realistic assessment of one's own abilities and a well-grounded sense of self-confidence;
2. *Social awareness*: understanding what others are feeling and thinking; appreciating and interacting positively with diverse groups;
3. *Self-management*: handling one's emotions so they facilitate rather than interfere with task achievement; setting and accomplishing goals; persevering in the face of setbacks and frustrations;
4. *Relationship skills*: establishing and maintaining healthy and rewarding relationships based on clear communication, cooperation, resistance to inappropriate social pressure, negotiating solutions to conflict, and seeking help when needed; and
5. *Responsible decision making*: making choices based on an accurate consideration of all relevant factors and the likely consequences of alternative courses of action, respecting others, and taking responsibility for one's decisions.

CASEL and like-minded researchers proposed that school curricula must provide learning experiences that address students' development in the academic, emotional, social, and moral domains (Cohen, 2006; Elias & Arnold, 2006; Zins, Weissberg, Wang, & Walberg, 2004). Notice that the five competencies involved the domains of cognition/thinking (responsible decision making), affect/emotion (self-awareness and self-management—handling one's emotions), and conation/self-regulation (self-management—setting and accomplishing goals; persevering), in addition to the social domain (social awareness, relationship skills). These researchers suggested that by developing a safe and secure environment and directly teaching the above listed social-emotional competencies, students will not only be more academically engaged, thereby learning more academic material, but also less likely to engage in risky behavior that would be detrimental to their development. Additionally, they proposed that when schools form partnerships with the families and community organizations of students they serve, the impact of the school is made even stronger (Patrikakou & Weissberg, 2007; Zins et al., 2007).

Spiritual Intelligence

Huitt and Robbins (Chapter 9, this volume) summarized the views of many researchers in the area of spiritual intelligence and the development of spiritual competence by describing it as: (1) an inherent human component, (2) considered important by a vast majority of people both in the developed and developing world, and (3) extremely difficult to define and assess with any reliability and validity. There are multiple components of a definition of spirituality, including, but not limited to, the ability to connect to the sacred (Pargament & Mahoney, 2002); the ability to generate meaning and purpose for one's life (Frankl, 1997, 1998); self-awareness (Zohar & Marshall, 2000); and the ability to create deep, personal relationships with one's self, with others, with nature, and universal unknowns (Hay & Nye, 1998). Maslow (1971) suggested that human spirituality is an existential, transpersonal quality that is the essence of one's humanity. However, a number of authors have questioned whether spirituality should be considered an intelligence or better thought of as an aspect of another domain of human potential such as cognition or emotion (Emmons, 2000; Gardner, 2000a; Juneer, 2000).

As in the other domains, one of the complexities when investigating spirituality is the attempt to distinguish spiritual intelligence (a capacity or aptitude) from spiritual competence (an expertise or skill). For example, Amram (2007) identified seven dimensions of spiritual intelligence after interviewing 71 individuals from a wide variety of spiritual practices. Amram

16

and Dryer (2008) then developed a self-report instrument, The Integrated Spiritual Intelligence Scale (ISIS), with items in five categories:

1. *Consciousness*: Developed refined awareness and self-knowledge;
2. *Grace*: Living in alignment with the sacred manifesting love for and trust in life;
3. *Meaning*: Experiencing significance in daily activities through a sense of purpose and a call to service, including persevering in the face of pain and suffering;
4. *Transcendence*: Going beyond the separate egoic self into an interconnected wholeness;
5. *Truth*: Living in open acceptance, curiosity, and love for all creation.

Notice that the definitions of each of these indicate that a potential has been actualized at an adult level, at least in a manner that allows the individual to be conscious of its expression. For those working with children and youth, the same difficulty exists with qualitative assessments of spirituality (Hodge, 2001). Roehlkepartain, Ebstyne, Wagener, and Benson (2006) provided an excellent review of the current literature, yet considerable work is needed to identify the developmental sequences for children and youth as they actualize their innate potential in this domain.

Palmer (1998/1999, 2003) has long advocated that spirituality should be part of a classroom teacher's training and practice. McGreevy and Copley (1998/1999) offered a number of suggestions for doing so, including a focus on the arts, making the classrooms and school a place of beauty, taking time to ponder profound issues and questions that students want to address, and involving students in service learning projects. Kessler (2000) identified what she calls seven gateways to the soul that teachers can use as part of their classroom practice. Huitt and Robbins (Chapter 9, this volume) showed that each of the pathways Kessler identified has been considered important by other researchers. However, Kessler stated that if these activities are to address spiritual development, they must be dealt with in ways that are meaningful to each student. If they are dealt with in a perfunctory manner, students will not develop the deep, personal connections required for developing spiritual competence.

Moral Intelligence

Recent research has refocused attention on moral intelligence and the development of moral character. Hauser (2006) provided an overview of the innateness of human moral intelligence; Narvaez (2007, 2008b) proposed that neurobiology bestows a foundation upon which moral character development is built. Coles (1996, 1998) found that the moral development

17

of children is closely intertwined with other domains of development, especially in the cognitive, emotional, social, and spiritual domains. Vessels and Huitt (Chapter 10, this volume) reviewed literature showing that every approach to developmental and learning theory had a theory of moral development. For example, behaviorists (Skinner, 1971; Wynne, 1986) and sociologists (Berkowitz & Grych, 1998; Durkheim, 1961) believed that morality is the direct result of the application of consequences or the intentional transmission of social rules and norms. On the other hand, sociobiologists (Miele, 1996) and nativists (Rousseau, 1979) focused on genetics and maturational influences. Some interactionists, represented by psychoanalytic (Adler, 1995; Freud, 1990), psychosocial (Erikson, 1993), and socio-analytic (Hogan & Emler, 1995) theorists, thought of morality as instinctual and in need of control or socialization while other interactionists, represented by cognitive- and affective-developmental theories (Gilligan, 1977; Kohlberg, 1984; Piaget, 1969) and social cognition theories (Bandura, 1977, 1991b) thought of human morality as essentially good to be developed through interaction with the environment. Finally, there are theorists who see morality as rooted in personality and personal identity (Blasi, 1993; Erikson, 1994).

While there are a number of definitions for moral intelligence, most of them revolve around the habits and patterns of thought, emotions, intentions, and behavior associated with issues of right and wrong, especially in a social context (Vessels & Huitt, Chapter 10, this volume). In the United States, the development of moral character was seen as a fundamental requirement for having a well-functioning society, especially a multicultural democracy (Myers, 2000), and was one of the primary reasons for initially promoting universal, public education (Huitt & Vessels, 2002). A similar expectation provided the rationale for a global expansion of compulsory schooling (Benavot & Resnik, 2007). However, with the increased emphasis on academic learning in the latter half of the twentieth century, moral and ethical education was deemphasized.

There are a wide variety of moral character development programs ranging from moral quality of the month, to the integration of moral character activities into academic lessons, to whole-school programs where instruction is focused on moral character, to service learning programs integrated into the curriculum (Vessels & Huitt, Chapter 10, this volume). In general, research shows that programs work best when they are (1) school-wide, (2) include a school-family connection, (3) include an emphasis on addressing multiple components of moral character (eg, thinking/cognition, affective/valuing, volitional/intending, and behavior described in fairly traditional ways), and (4) provide opportunities for students to demonstrate their development by providing service to others. The goal for these programs is to have students develop an identity of themselves as virtuous

people and to build an extensive repertoire of experiences that supports this identity (Borba, 2002).

In my opinion, Narvaez's (2008b) triune theory of moral development and its implementation through the Integrative Ethical Education program (Narvaez, 2006) shows great promise in providing an integrated approach to moral development. While there are certainly many commendable character education programs that are available (eg, Battistich, 2003; Elkind & Sweet, 2004; Lickona, Schaps, & Lewis, 2003), Narvaez's approach not only explicitly makes reference to the neurobiological foundation of moral character, it directly addresses the underlying components related to the domains of affect/emotions (ethical sensitivity), cognition/thinking (ethical judgment), conation/volition (ethical motivation) as well as the actual display of moral behavior (ethical action), especially in service to others (service learning). It, therefore, addresses more of the various viewpoints of moral character development discussed by other researchers.

Self and Self-views (Intrapersonal Intelligence)

Many researchers have demonstrated that the concepts of self and self-views are essential to the study of human behavior. Probably the most fundamental concept is that of temperament, considered an innate or inherited aspect of personality (Derryberry & Reed, 1994; Keirsey, 1998). For example, one's levels of excitability or irritability are considered aspects of one's temperament as well as one's tendency to introversion or extroversion. Temperament has been shown to be related to learning style (Oakland & Joyce, 2004), development of competence and motivation (Rothbart & Hwang, 2005), the type of career one prefers while a student (Oakland, Stafford, Horton, and Glutting, 2001), and the type of career one selects as an adult (Keirsey, 1998).

Personality is another way of conceptualizing how an individual organizes one's thinking, feeling, intending, and behaving. The most widely used description is the 5-Factor model (McCrae & Costa, 1997). The five factors (making the acronym, OCEAN) are (1) openness (an active imagination, a preference for variety, or a display of intellectual curiosity); (2) conscientiousness (being precise and careful or thorough); (3) extroversion (a tendency to look outside the self for stimulation and pleasure); (4) agreeableness (a tendency to be pleasant and accepting in social situations); and (5) neuroticism (a tendency to experience negative emotional states.) These factors have been related to a number of outcomes including political preferences (Carney, Jost, Gosling, & Potter, 2008), tendency to use alcohol or drugs (Flory, Lynam, & Milich, 2002), one's passion for internet activities and willingness to express one's 'true self' online (Tosun & Lajunen, 2009),

becoming a 'node' in a social network (Liu & Ipe, 2010), and different aspects of leadership (Judge, Bono, Ilies, & Gerhardt, 2002).

The Myers-Briggs Type Indicator (MBTI) is an alternative view of personality (Myers, 1995). This approach was based on the work of Jung (1971) and proposed that people differ in terms of their preferences related to four dimensions (extrovert-introvert, sensing-intuition, feeling-thinking, and judging-perceiving.) The MBTI has been used in such areas as identifying learning styles (Lawrence, 1984), career selection (Kennedy & Kennedy, 2004), processing social information (Edwards, Lanning, & Hooker, 2002), problem solving and decision making (Huitt, 1992), and leadership styles and working in teams (Kroeger & Thuesen, 1989).

Yet another conceptualization of personality is that of personality traits (Peterson & Seligman, 2004), who identified twenty-four character strengths grouped into six virtues (wisdom and knowledge [cognitive strengths]; courage [emotional strengths]; humanity [interpersonal strengths]; justice [civic strengths]; temperance [strengths protecting against excess]; and transcendence [strengths providing meaning by connecting to something outside of one's self].) Notice that these categories of strengths overlap considerably with the previous descriptions of capacities. Peterson and Seligman's believe that this list of strengths and virtues represents universal positive traits that people use to identify their most important qualities or characteristics.

Finally, there are a number of self-views (eg, self-concept, self-esteem, self-efficacy) that have been explored for their relationship to school achievement and life success. These differ from other measures discussed above in that they are conceptualized as being constructed by the individual through reflection on one's interaction with his or her environment. Initially, it was thought that measures of these constructs related to the cognitive, affective, and volitional domains respectively (Bandura, 1994; Campbell, 1990; Kernis, 2003; Marsh & Hattie, 1996). However, later research showed that there are components of each of these domains in each of the measures (Swann, Chang-Schneider, & McClary, 2007). Swann et al. advocated that a better conceptualization of self-views would relate to the specificity of the view and its relationship to an appropriate level of generalization. For example, if a researcher wanted to predict how an individual's self-view related to a general outcome of life success, then the appropriate predictor would be a general measure of self-concept or self-esteem. One the other hand, if one were looking for a relationship between a self-view and academic achievement, a measure of academic self-concept or self-esteem would be most appropriate. Finally, if one were trying to predict success on a specific task, then a measure of self-efficacy related to the specific task would be best. Most importantly, research over the past two decades has shown that attempting to raise a student's general self-concept or self-esteem through

involvement in non-academic tasks bears absolutely no relationship to how well one does academically (Baumeister, Campbell, Krueger & Vohs, 2003).

Summary and Conclusions

A major challenge with traditional approaches to education and schooling is that the focus on academic disciplines leads to an assessment of what children and youth know, not what they can do. However, as adults, what one can do, especially in solving challenging problems, becomes more important. Unless careful attention is paid to actual performance, the same dilemma can trap parents and educators into focusing on competencies in different domains rather than placing children and youth into situations where they must address complex, unstructured challenges that require them to use capabilities from multiple domains. At the same time, it is unreasonable to expect children and youth to develop these competencies and capabilities without specific skills development. One of the benefits of having children and youth engage in group-based activities such as academic service learning, theatre, or sports is that they have the opportunity to use all of their competencies and capabilities in an integrated manner.

One challenge in attempting to focus on the whole person is that often times frameworks that seem to focus on only one domain actually focus on several. For example, Costa and Kallick (2008) developed a framework titled Habits of Mind (see Table 1-2). While this framework is often considered as focused on the cognitive domain, only seven of the 16 actually relate to cognition and thinking (eg, strive for accuracy, think flexibly, and think about one's own thinking). Eight others relate to affect and emotion (eg, listen with understanding and empathy, find humor), conation and volition (eg, manage impulsivity, persist, take responsible risks), and social (eg, effective communication, interpersonal effectiveness). The last habit, metacognition, provides a bridge across the domains as it relates to one's integrated thinking about capacity and competence in the other domains. Combining this framework with ones that would focus on physical development, spiritual development, and moral character development is an excellent way to begin to build a more holistically-oriented set of experiences for children and youth.

An issue that must also be considered is that of assessment. Developing e-portfolios that consist of videos of learners engaging in problem solving as well as examples of completed products that result from that process is one way of enhancing the data compiled from traditional knowledge assessments. Looking through this qualitative and quantitative data, parents and educators can develop a narrative of a child's development across multiple domains. It is this narrative of the whole person that is important, not a score on a single assessment in a single domain.

Table 1-2. Habits of Mind

Domain	Habit	Description
Cognition/ Thinking	Gather data through all the senses	Use all sensory pathways: gustatory, olfactory, tactile, kinesthetic, auditory, and visual.
	Strive for accuracy	Check facts; nurture desire for exactness, fidelity, craftsmanship, and truth.
	Question and pose problems	Consider what data are needed; find problems to solve.
	Apply past knowledge to new situations	Access prior knowledge and transfer that knowledge to new contexts and problems
	Think flexibly	Change perspectives, generate alternatives, and consider multiple options.
	Create, imagine, and innovate	Generate novel ideas, seek fluency and originality.
	Think about one's own thinking (metacognition)	Become aware of own thoughts, feelings, intentions, strategies, and actions and how these affect others.
Affect/ Emotion	Listen with understanding and empathy	Connect cognitively and emotionally with others.
	Respond with wonderment and awe	Be intrigued by the world's phenomena and beauty. Find what is awesome and mysterious in the world.
	Find humor	Look for whimsical, incongruous, and unexpected in life. Laugh at self when possible.
Conation/ Volition	Manage impulsivity	Think before acting.
	Persist	Seeing task through to completion.
	Take responsible risks	Live on the edge of one's competencies.
	Remain open to continuous learning	Be proud of what one knows and humble enough to admit one doesn't know. Resist complacency.
Social	Think and communicate with clarity and precision	Strive for accurate communication in both written and oral form; avoid overgeneralizations, distortions, deletions.
	Think interdependently	Work with and learn from others in reciprocal situations.

* Adapted from Costa and Killick (2008)

Nevertheless, it is important to focus on development within domains and the focus of the next chapters will provide more detailed information about each domain, how competencies within that domain development, how structured learning experiences can enhance the development within that domain, and how competencies and capabilities within that domain can be assessed. A final chapter will discuss how these can be addressed with a focus on developing citizens who can contribute to human civilization, both at the local and global levels.