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2015 Brock International
Prize in Education Nominee

Barbara K. Given

Nominated by Teresa M. Zutter

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NOMINATION

Barbara Given is an extraordinary heroine in education who has spread her knowledge about learning styles, personality types, learning disabilities and strategies to learn effectively not only from coast to coast in the United States of America, but throughout the world. Her work has changed the lives of thousands of children and adults for no less than 59 years and she is still going strong. Many of us who have known her professionally and personally refer to her as the "Energizer Bunny" because she never stops, never gives up, and never wears out. She has traveled the world presenting her research and wisdom on teaching and learning, including numerous presentations in:

- Frankfurt, Germany
- Helsinki, Finland
- Oslo, Norway
- Amalfi, Italy
- Manila, Philippines
- Athens, Greece
- Belfast, Ireland
- Beijing, China
- Heerlen, The Netherlands, (Holland)
- Ghent, Belgium
- Sydney, Australia
- York, England
- Auckland, Australia
- Perth, Australia

She began her career as a teacher in 1955 serving youth in various grade levels with serious learning impairments. After earning her Master of Science degree in elementary education at the University of Oregon, she then went on to pursue a Ph.D. in education of the exceptional at The Catholic University of America. She has enjoyed a robust career assisting both regular education students and students with special needs in a variety of roles, including that of principal of the Kennedy Habilitation Center in Baltimore. Among her many accomplishments as a professor at George Mason University, she has served as Co-Director, Dean Bowen's Mainstreaming Project, funded by the U.S. Office of Education, Acting Assistant Dean, College of Professional Studies, GMU, Director, Center for Honoring Individual Learning Diversity (CHILD); one of 30 International Centers, Director, Education Study Center, Graduate School of Education, GMU, Project Director, Learning Disabilities Certification Project, A U.S. Office of Education grant, faculty researcher at the Krasnow Institute for Advanced Studies, and Director, Adolescent and Adult Learning Research Center, Krasnow Institute. She is currently Associate Professor Emerita of Special Education, Graduate School of Education.

While her illustrious past endeavors are quite impressive, and the breadth of her influence quite broad over time and space, this nomination is focused on what she is currently doing with her work on teaching and learning to continue helping young people who are in greatest need for educational

intervention. Dr. Given was herself a student with an undiagnosed learning disability while growing up, and taught herself to read only at the late stages of her teen years. Her compassion and understanding of how difficult the academic world can be for students with special learning concerns permeate everything she does. She is genuinely passionate about sharing her knowledge with the world so that more children who are at the greatest risk for dropping out will continue to see the doors of learning stay open and welcoming to them despite their challenges.

She is currently working on her latest book, titled *Excellence in Teaching and Learning*, with Bobbi DePorter, President of the Quantum Learning Network (QLN) and co-founder of the SuperCamp program. Her first book, *Learning Styles: A Guide for Teachers and Parents,* continues to provide sage advice to adults to understand how the children they love and serve learn the ways they do and how to offer the best resources and techniques for learning to occur naturally and easily. Her second book, *Teaching to the Brain's Natural Learning Systems,* was published in 2002 and builds on the information about the 5 major learning frameworks of the brain: emotional, social, cognitive, physical and reflective learning systems. In this volume, she brilliantly explains the complexity of the latest neurobiological research and converts that information into practical applications for the classroom; and even more, she offers insights to expand learning and teaching best practices to the entire life environment of children and adults.

One of the primary reasons Dr. Given is being nominated for this prestigious award is her latest endeavor utilizing her suggestions for optimal teaching and learning for children in the foster care system right here in the United States. In 2011, I asked Dr. Given to assist me with a new innovative project to help youth in foster care to prepare for and succeed in college. I had started working for a national 501 (c) (3) public charity dedicated to improving life for child victims of abuse and neglect called First Star, Inc. Through this work, I learned that less than 3% of foster youth in the United States achieve a college education as compared to one third of regular 12th graders who go on to earn a college degree. The more I researched, the more shocked I became about what actually happens to the children entrusted to our care in the national foster care system. Susan Frey reported in an article published in EdSource on July 14, 2014: "In California, foster youth are the most likely to drop out of school and the least likely to graduate, according to a report by The Center for the Future of Teaching and Learning at West Ed. Many also become victims of sexual predators. Sixty percent of child sex-trafficking victims who were rescued in 2013 during an FBI operation in 72 cities had previously been in foster care, according to a report by the Center for American Progress. "

Dr. Given's personal intervention was critical to turning the tide on these appalling statistics on what happens to former foster children (taken from www.First Star.org website):

- Approximately 397,122 children were in the foster care system as of September 30, 2012.[i]
- 23,396 of those children aged out of foster care.[ii]
- Percentage of the general population age 25 and older who have a bachelor's degree: 31%[iii]
- Percentage of former foster children age 25 and older who have a bachelor's degree: 3%[iv]
- Percentage of the general population in jail or prison <1 %[v]
- Percentage of former foster children incarcerated since age 17: Males- 64%, Females- 32.5%[vi]

- Percentage of the general population who experience homelessness over the course of a year: <1%[vii]
- Percentage of former foster children who experience homelessness after aging out of the system: 24%[viii]
- Percentage of former foster children who are unemployed one year after aging out: 61%[ix]
- Percentage of former foster children who are unemployed five years after aging out: 53.5%[x]

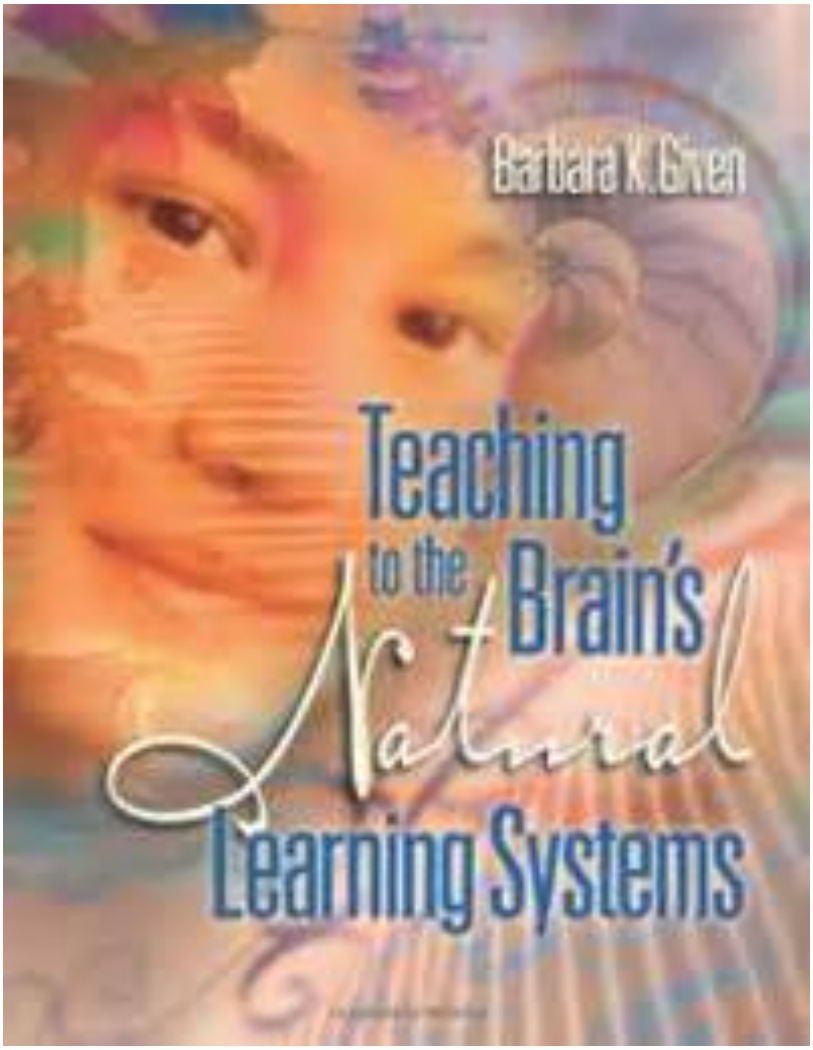
As soon as this data was shared with Dr. Given, she immediately agreed to become personally involved. I was responsible for writing the business plans and implementation handbooks for both the Greater Washington Academy hosted at George Washington University and the University of Rhode Island Academy, based on the initial UCLA Bruin Academy which began in 2011. Since she began her partnership with First Star, new Academies have started at the University of Connecticut, University of Southern Florida and Pepperdine. More Academies are currently in development. The goal is to implement 100 Academies nationwide within the next 10 years.

Dr. Given's lifelong work on brain research pertaining to teaching and learning became the framework for the Academies started in Rhode Island and Greater Washington and has been shared with subsequent Academies as fundamental scaffolding for all curricular offerings. Her expertise on how students learn, and more so, on why adults may fail to teach most effectively, was brought to the staff training as well as directly to the students themselves. She has helped both staff members and students understand the catastrophic effects of stress and trauma on young learners' brains and bodies. She has guided us on learning how to use the brain's natural systems to optimize the learning process both in the high school environment for students now and into their future college setting.

Dr. Given enthusiastically provided materials and presentations to help the Academies better understand why children in foster care may have so many difficulties in school and in life. She gave permission for her work to become the basis for the curricula offered in all of the Academies that have been started nationwide. She has provided insight for everyone involved to understand how events that were happening to children in foster care were not just symptoms of a massive systems failure, but also physiological and psychological insults to the brains of the children we are supposed to be helping. Understanding the negative neurological effects from abuse, abandonment, neglect, and chronic crises on learning and memory has allowed us to provide better interventions for academic success and social-emotional well-being for our students. Her training gives us the tools to know how to open up and heal traumatized adolescent brains so that the students can once again enjoy the flow of natural learning.

Before going into further detail on how her work has directly impacted the Academies' successes, it may be helpful to review a brief excerpt of her work on the Natural Learning Systems from her book, *Teaching to the Brain's Natural Learning Systems. (*Reprinted with copyright permission by ACSD.)

Directly following the chapter excerpt is a general overview of the First Star Foster Youth Academy. A more detailed example of the infrastructure and curriculum demonstrating how the natural learning systems research serves as the primary framework for the components of the program goals and objectives is available at the end of the nomination packet.

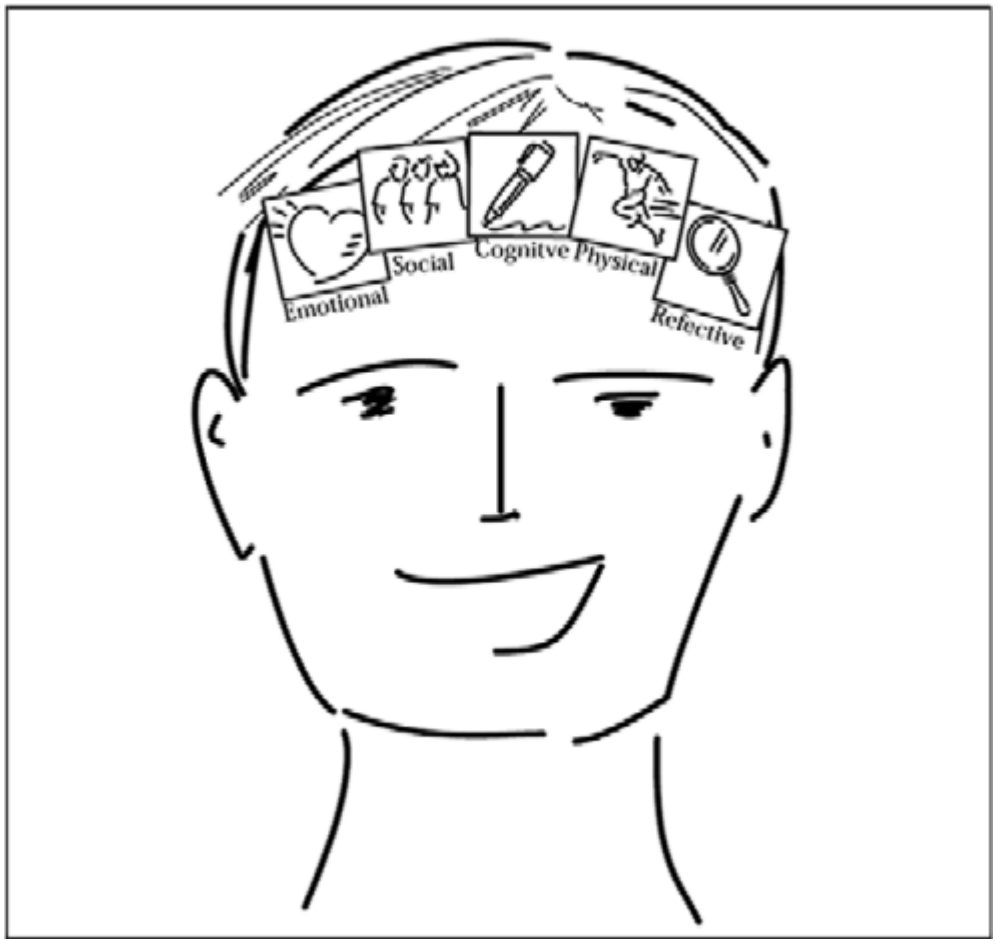


Chapter 7. Theaters of the Mind

Various brain modules process information in parallel fashion throughout each hemisphere and from one hemisphere to the other, not in a step-by-step or serial fashion but—for the most part—simultaneously. For example, imagine sitting in a sunroom on a cool, crisp, bright day, reading a book. Even though your visual system is focused on printed symbols and their meaning, it also processes aspects of the sun's rays reflecting off the crystal pendent swinging in the window. Meanwhile, your auditory system is aware of the neighbor's son bouncing a basketball in the driveway. Smells of new-mown grass penetrate your olfactory system, and feelings in your lower abdomen prompt you to take a toilet break. Each system—and its multiple subsystems—functions like its own minitheater with its own internal movie playing. Thus, information processing resembles a multiplex movie theater where the

brain's “theaters” never totally close, but remain ever vigilant in some wide-awake or sleepy state (Figure 7.1).

Figure 7.1. Theaters of the Mind



When input from the five major theaters simultaneously stimulates the brain's multimodal association areas, focused attention and learning occur. Confused thinking reigns, however, when the different systems attend to different “movies.” This condition supports Edward de Bono's (1985) contention that the main difficulty of thinking is confusion. According to his research, people try to do too much at once and need to slow down their thinking and focus. That is what we do when we attend primarily to one mental movie or system and its subsystems; however, sounds, sights, and smells from the other systems intrude to demand equal attention like freshly popped corn beckoning us to the lobby. For example, intentions to revise a science report (cognitive system) can conflict with feeling the sting of a teacher's sarcasm (emotional system), peer isolation when excluded from a group project (social system), discomfort of a racing heart (physical system), and anxiety at causing parental discord (reflective system). They are all like competing mind movies demanding equal attention.

The emotional, social, and physical learning systems tend to be the most powerful in terms of their demands. The level of their functioning determines how effectively the cognitive and reflective systems operate. Thus, even in the multiplex theaters of the mind, some movies overpower others. Figures 7.2 and 7.3 show how a lack of balance among the brain's natural learning systems negatively affects an individual when any one system either develops at the expense of others or becomes neglected.

Figure 7.2. Personal Effects of Overreliance on One Learning System

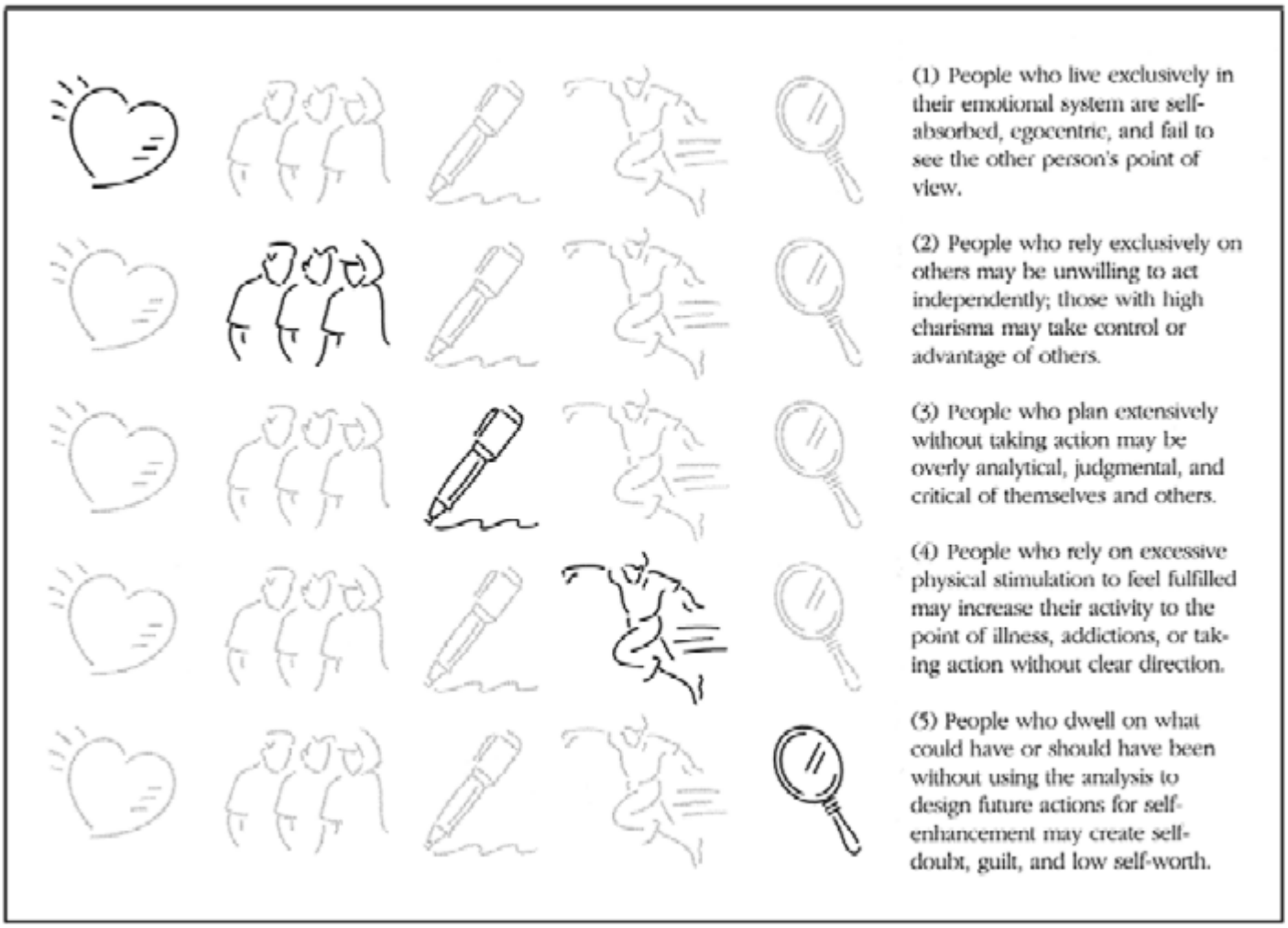
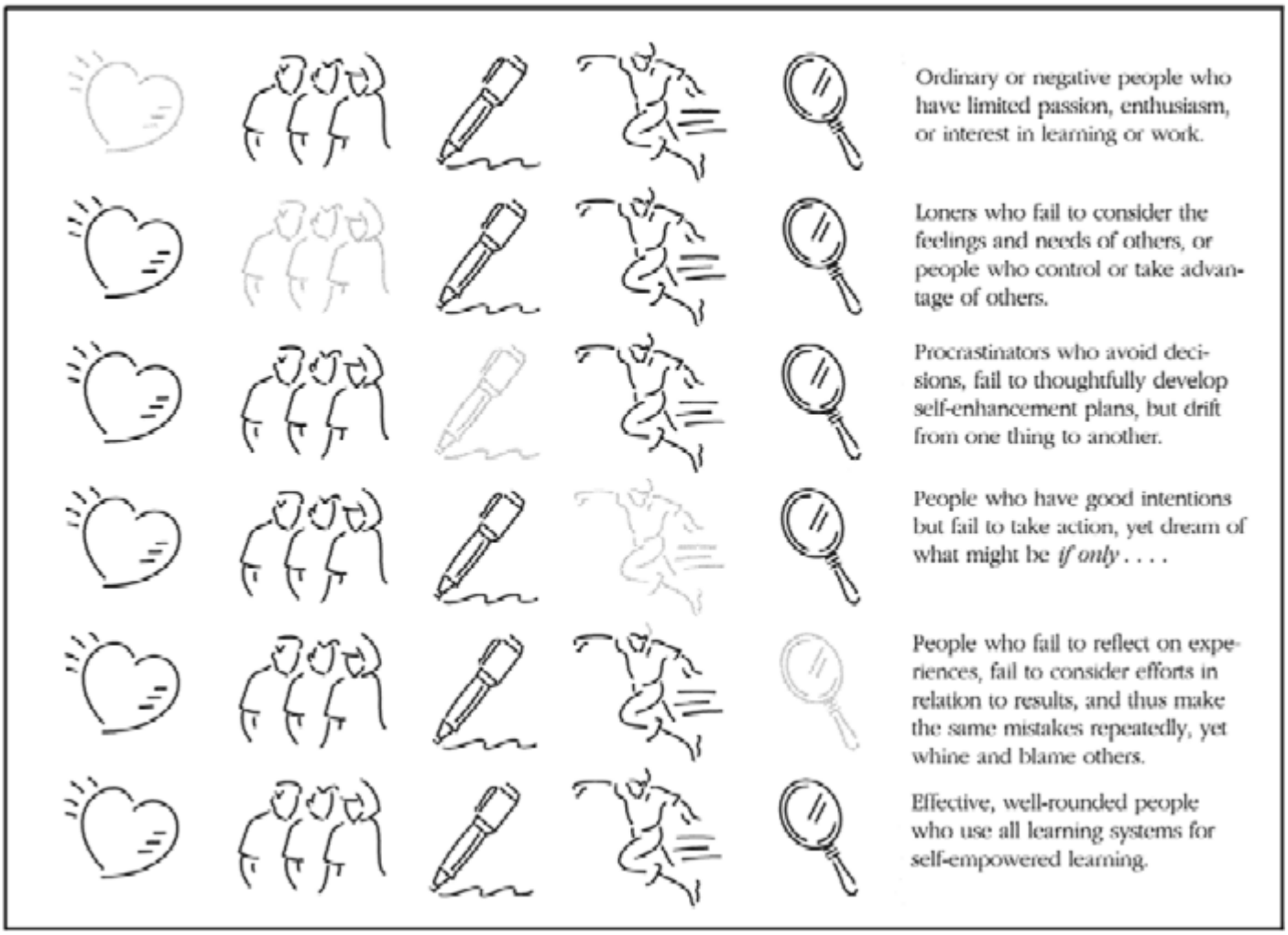


Figure 7.3. Personal Effects When a System is Underdeveloped



Multiply the theaters of one person's mind by the number of students and adults in a classroom, and try to imagine the mental complexities involved. It is staggering! Nonetheless, the five functional operating systems serve as a framework for teaching and learning to reduce the overall complexities. We can meet basic psychological needs collectively within a respectful learning environment and honor the individual learning systems within the classroom culture.

If teachers develop lesson plans and interact with students by consciously—and daily—addressing the brain's major learning systems or theaters of the mind, then schools can be a place where students are eager to go and reluctant to leave. By attending to each of the brain's natural learning systems, teachers and students can develop learning communities with a code of conduct where everyone expects and values achievement, where active learning is the standard. These are classrooms that promote friendships, where students desire group membership, and where each individual strives to achieve her personal best in the pursuit of personal learning goals. Although these standards are idealistic, our extended consciousness allows us to transform these imagined standards into today's classrooms. Why should teachers expect anything less of themselves and their students than to image the best? We must

see what we desire in our mind's eye so we can convert what we imagine into reality. As an unknown poet once wrote: “You must give birth to your images, for they are future waiting to be born.”

Teachers

Most people use the term *teacher*, which comes from Middle English, to mean “one who professes or imparts knowledge or skill.” Before we understood that learning involves more than the intake of information, “professing” seemed quite adequate. But today, learning as a process is more akin to socialization than instruction, and it requires teachers who orchestrate development of the major learning systems within and across individuals (Ford, 1992).

Throughout this book, I introduced different teacher roles that support each of the learning systems: (1) model and mentor, (2) collaborator, (3) facilitator, (4) coach, and (5) talent scout and guide. Nowhere did I recommend the *lecturer* or *professor* role. Although content-oriented minilectures are sometimes appropriate, they should be kept short (10 minutes) or at least interspersed with meaningful student involvement.

If we rethink the term *teacher* as that of model and mentor, collaborator, facilitator, coach, and guide, the descriptions would cast a new light on how teachers view themselves and how they teach students. The process of teaching would focus on forming habits for lifelong learning, rather than just acquiring discrete fragments of information. But student development of agile learning habits throughout the brain's natural learning systems and teachers shifting from “professing” to more productive roles take concerted effort and time. As Wildman and Niles (1987) point out:

Research on human learning implies that professional growth in teaching has an emerging quality, that the process takes substantial time, and that complex understandings and skills follow developmental patterns that have been understood in psychology for years but rarely applied to the training of teachers. . . . Complex understandings must be constructed from experience, and because experience can be constructed and reconstructed in many ways, the process is rarely ever finished. (pp. 5–6)

A rose by any other name is still a rose, but rethinking the concept of teaching dramatically alters what happens in the classroom and, consequently, what happens outside of it.

Learning Systems Summary

Just as we possess interconnected physical systems, we also maintain five interconnected learning systems associated with emotions, relationships, cognition, the senses, and assessment of self in one's environment.

Emotions

In brief, the emotional system determines personal passions, dreams, and desires. It projects a person's spirit, demeanor, and creativity, generating a sense of self that empowers and energizes or depresses and stifles all other systems. Emotional learning can be conscious, but it is generally unintentional or unconscious. For example, emotion—especially emotion occurring during critical periods of growth—programs specific reactions in a small almond-sized part of the brain called the amygdala. At the sight of a particular teacher who looks like someone who caused pain or injury in the past, the amygdala triggers physical reactions like anger, and the student feels uncomfortable but does not know why (Alkon, 1992). Emotional learning can also be deliberate, such as when convincing yourself to be genuinely happy for a friend who got the job you wanted.

Relationships

Social learning can also be either automatic or intentional. For instance, toddlers learn a language or develop prejudices and beliefs from family members automatically or without conscious effort. When peers work together to solve a problem, social learning becomes intentional and collaborative.
With the help of relationships, the social system governs interactions and communications with the self and others. It dictates what language develops, fosters collaborative problem solving, and honors individual diversity. The social system thrives on acceptance, love, and belonging.

Cognition

The cognitive system interprets, stores, and retrieves information; deliberately focuses on information; and intentionally provides input for all other systems. This system functions best when a person feels safe and secure rather than threatened. Cognitive learning is generally explicit—that is, intentional and purposeful (like much "school" learning)—however, it is also subject to implicit input from other systems.
For example, even though you may go to the library and research various car models and decide which one to purchase based on the model's maintenance record and gas mileage, a car salesman may say something to convince you differently by tapping into your emotional or social systems. While showing you a car of lower standards, for example, he may say, "I can see you are a lot like me; you are thoughtful and deliberate in your purchases. That makes my job of selling you this car much easier." The implicit desired response is, "This salesman really respects me. He wouldn't sell me a car with lower standards than I desire." Thus, although your cognitive intent is to purchase based only on researched qualities, the salesman's expertise at triggering your emotional and social systems may result in a purchase you later regret (Cialdini, 1984).

The Senses

The cognitive system gathers information through the senses, interprets it, and distributes it throughout the brain and body. The physical system is responsible for transforming those interpretations into action. The physical system also responds directly to stimulation on an automatic level as well as a thoughtful level. Physical learning may take a long time to accomplish, such as when learning to ride a bicycle, but once learned, you can jump on one and ride down the street after years away from the trusty two-wheeler. In addition, physical learning can be reactive like the other systems. For example, children who grow up with lots of hugs tend to become *automatic* huggers. Those who grow up with physical abuse tend to become abusive.

The Self

The previous four systems—emotional, social, cognitive, and physical—operate within an environmental context to provide verbal and nonverbal learning opportunities for reflective learning. Because factors within specific environments and different circumstances vary, the reflective learning system acts as an ongoing monitoring mechanism for the individual. Reflective learning can be purposeful or automatic, unintentional, and unconscious. It is purposeful when the individual reflects: "Under these circumstances, in this environment, how am I doing? What do I need to do to increase my learning?" Reflective learning weighs past, present, and probable thoughts and behaviors, and then predicts future outcomes by asking self-directed questions. This monitoring system plays a key role in determining how people function in society and how they construct their lives. It is automatic when elements or events in the environment influence learning without one's awareness; reactions occur without thought as to why or what to do about them. I once heard an inspirational speaker say that most people are *unconscious* most of the time, because they move through their days and nights on automatic pilot based on

previously learned behavior. Bringing those kinds of behaviors to one's awareness and reflecting on them is part of the reflective learning system's function.
Learning systems are dynamical. They are active. They are constantly adjusting and adapting. And once adjusted, the new learning is irreversible. There is no way to go back and unlearn something. The learning may be forgotten, but it cannot be unlearned. Try unlearning how to tie a shoe or unlearn that President John F. Kennedy was shot in Dallas. It can't be done; thus learning systems are qualitatively and quantitatively different as a result of experience.

Educational Considerations

Educators can address the interplay among the learning systems by using them as a mental framework for planning lessons and instruction. Figure 7.4 provides a visual representation of possible implications of the learning systems and how educators can use them to guide their own teaching and students' learning development.

Figure 7.4. Educational Implications of the Brain's Natural Learning Systems

The Brain's Natural Learning Systems	Learning Goal	Basic Learning Needs	Driving Behavior	Self-Directed Questions	Healthy Development of This System	Desired Teacher Behavior	Result of Over-reliance on This System	Result of Under-development of This System
Emotional	Self-direction	Need to be me	Passion	*Are my hopes, dreams, and desires for my highest good?*	***Self-Empowered Learning:*** Develops a passion for achieving personal goals	Mentor model	***Self-absorbed.*** Egocentric, selfish	***Slug.*** Lethargic; lacks self-direction & motivation. Acts helpless
Social	Self-assurance	Need to belong	*Vision and Collaboration*	Is my vision clear and socially responsible?	***Collaborative Learning:*** Interacts with others to develop a clear vision of goal attainment	Collaborator	***Overly Dependent.*** Limited leadership skills or unhealthy control of others	***Isolate.*** Fails to consider emotions & needs of others; antisocial.
Cognitive	Self-regulation	Need to know	Intention	*What knowledge and skills do I need? Am I planning effectively?*	***Strategic Learning:*** Identifies needed know-ledge and skills for goal attainment and develops plans for achieving them	Facilitator	***Fault-Finding.*** Overly analytic; sees own approaches as only correct ones; nit-	***Aimless Drifter.*** Procrastinates; develops limited knowledge & skills; avoids decisions.

							picks at others	
Physical	Self-control	Need to do	Action	*Am I implementing my plan?*	***Active Learning:*** Takes healthy action for goal attainment and self-systems management	Coach	***Physically Absorbed.*** Excessive dependence on physical stimulation	***Dreamer.*** Takes limited action toward goal attainment.
Reflective	Self-assessment	Need to experiment & explore	Reflection	*Am I making steady progress toward my goals? Do my actions match my values?*	***Reflective Learning:*** Self-analyzes actions, attitudes, and accomplishments followed by predicting and anticipating the future	Talent Scout Guide	***Self-doubting.*** Filled with guilt; dwells on own "mistakes"; fails to use them for continued progress	***Whiner.*** Blames others for own failings.

Lesson plan development begins by determining what students need to know or be able to do (cognitive system). A board of education often makes this decision, which becomes articulated in the local or state standards of learning that identify the desired knowledge and skills. In other words, the standards build the foundation for evaluating knowledge and skill development. The next step is to brainstorm numerous ways to do the following:

1. Tap into students' personal goals and make the lessons personally relevant (emotional learning system).
2. Provide authentic solo, tandem, small-group, and teacher/student learning experiences that promote acceptance of diversity and generate a sense of belonging (social learning system).
3. Facilitate intentional learning for knowledge and skill construction through authentic problem-solving challenges (cognitive learning system).
4. Create active involvement through meaningful projects (physical learning system).
5. Teach students to analyze their progress, consider ways to enhance it, and develop plans for continued growth (reflective learning system).

These plans create a *passion* for learning, a *vision* of what is possible through *collaboration*, and a deliberate plan of *intention* supported by consistent and meaningful action and *reflection*. They address students' *need to be* ("I gotta be me!"), *need to belong, need to know, need to do*, and *need to experience and explore*.

Once the brainstorming for each system is exhausted, keep the resultant lists in a safe place for later use with subsequent units. Determine how much time is available for each unit of study and begin dividing the information into time segments in terms of weeks. Once you determine which content you intend to teach each week of the unit, use the lists to determine what each day will include, then divide the days into time units, and—toward the end of planning—into minutes for each part of the lesson.

Usually, a human interest story, related riddle, short video, or some other enjoyable way to tap into what students already know helps them connect personally to the topic. This is a good way to begin a new study or review something in progress or completed.

Remember also that when you provide experiences to students, you need to allow them to engage each major learning system and sensory modality without forcing them to use one that feels unnatural and uncomfortable. When you make various experiences available to students, they may try alternative ways of learning once they see others enjoying the experience, thereby tapping into their preferred learning styles and experimenting with other styles (Dunn & Dunn, 1992, 1993).

For example, material for students to read may be:

- tape recorded for those who prefer listening to the information,
- blocked into segments for tandem reading for those who work best with another person,
- presented with a list of questions for those who like focused reading,
- entered into a computer-driven program that highlights the text as it pronounces the words (such as with the Kurtzwell 3000 program),
- read within a small group where it can be discussed.

In a conference presentation, Marie Carbo, a reading specialist and learning-styles advocate, suggested that students who like to move may read while peddling a stationary bicycle with the book resting on a handlebar shelf. Rita and Kenneth Dunn (1992) suggest that children may be allowed to stand, walk, sway, sit, or lie on the floor while reading. The major stipulation of developing a learning-styles classroom is that students may use a specific accommodation if it does not interfere with the learning of others and if the student's performance is as good as or better than previous performance.

This brief overview of lesson development assumes that teachers reading this book have a basic pedagogical knowledge from which to draw. That background should be enough to experiment with teaching to the brain's natural learning systems. Without question, however, developing new teaching skills will take work, enthusiasm, and a determination to grow in one's chosen profession.

Summary

Three themes flow through this book. The first pertains to the brain-body's neurobiological operating systems for emotions, social interactions, cognitive functioning, physiological learning, and reflective insights. The second deals with environmental influences on those same systems; the third refers to the self-constructive nature of thinking and learning that controls and manipulates emotions, interactions, cognitions, behaviors, and reflective thought. From a rich mix of these three themes, I identify five major learning systems—emotional, social, cognitive, physical, and reflective—that can be used extensively as a framework for curriculum design and generic lesson planning, as well as a precursor for teaching to individual learning styles.

Because we, as humans, have five functional learning systems operating in specialized but parallel ways, we can mold ourselves into totally different human beings. We are not only conscious of things via our cognitive system, but also conscious of how we feel about them; therefore, it is reasonable to assume that we have a modular system concerned with emotion that is parallel to our cognitive system (Restak, 1994). By the same token, we are conscious of our culture and our preferences for working with partners and colleagues; we also know when we want to work alone. We are conscious of being active and engaged learners, and we know when we are passive and uninvolved in the learning process. We reflect on our past experiences and plan for the future. We develop strategies to help us learn, and we think about our own thinking. We do all these things while our natural learning systems address basic psychological needs unique to the human mind. When those needs are met, the systems function

effectively. When our basic psychological needs go unmet, one or more of the systems are less than effective. Teachers can attend to the mind's psychological needs when they know what roles to play and what needs to address.
The neurobiological systems function in parallel like five theaters of the mind—all vying for attention. Teachers must respond in some meaningful and individually determined way to each of them. Not only must they accomplish this amazing feat for themselves, but they must also help students put their own learning systems together in personally satisfying, socially appropriate configurations. In other words, educators are in the business of brain construction: How we develop and implement lesson plans will determine—in large measure—what kinds of minds our students construct. The key to effective brain construction may be how teachers use the natural learning systems as a framework for linking neuroscience and education.

Challenges Facing Youth in Foster Care and What Happens Without Appropriate Teaching and Learning Interventions

Despite the remarkable national reputation held by Fairfax County, Virginia, and the Washington Metropolitan area, there are, nonetheless, thousands of residents who face devastating circumstances that can literally tear their families apart. These events, including the effects of poverty, cause children to experience a multitude of challenges, including frequent and unpredictable life interruptions, parental unemployment or insufficient pay for work, homelessness, malnutrition, absent or substandard medical care, substance abuse, child neglect and abuse, domestic violence, home life strife and too often, separation from their families due to emergency out-of-home placements. Even when families live above the poverty line, homes can be destabilized by social and personal pressures that erupt into household destabilization. One of the stark realities of this distress is the number of children brought into the protective custody of emergency foster care services. When this occurs, the hope is that the family situation will be resolved allowing children to return to their homes within a few days. However, often this is not the case and the emergency situation stretches out to months and sometimes years of out-of-home placement.

While some of these children are infants, the age range extends from those just starting their lives all the way to those who are twenty-year-old young adults. Many are early adolescent youth. Their lives often have been shattered by situations involving serious neglect, abuse or other profound disruptions to family life. They desperately require consistent and relevant assistance with their physical, psychological, social, and educational needs. These young people struggle with family and identity losses, unpredictable and often disheartening events that interrupt normal life plans, and injury to their sense of confidence, belonging, self-worth, and peace of mind. Many of these children face an uncertain future, relegated to years in the foster care system, and plagued by barriers to their success beyond their control. They must beat the odds that face a great many of our foster care children nationwide, namely: vulnerability to homelessness, unemployment, emotional distress, early parenthood, court involvement, and limited post-secondary educational opportunities due to insufficient monetary resources. Even when these youth possess the knowledge, skills, and positive

attitude to overcome these potential hardships, many still eventually succumb to these adversities without intensive and ongoing support by their communities.

Foster youth often find themselves economically marginalized from their peers. The average 18-year-old does not have to worry about where he or she is going to live or how much money he or she will have to earn to make this month's rent. Many young people in foster care do not have the option of turning to their families for emotional, financial, educational or housing supports. Instead, they have to figure out how to make ends meet on their own. Foster youth need to be afforded the same supports and opportunities as their peers without the added pressure of trying to make ends meet in tough economic times. The economic marginalization of youth in foster care creates tremendous disadvantage in employment and education, as well as potentially impacting their self-esteem and ability to feel like they "fit in" with their peers.

The educational playing field is not only NOT LEVEL; it is pocked with academic landmines. Failure to achieve graduation from high school further impedes the ability to obtain reasonable employment. Basic self-sufficiency is pushed further away from reach, leading to greater home instability and high risk circumstances. Despite efforts to continue support for these young people, the damage is complete to any true sense of security. The lives of foster care children too often experience such devastating blows to basic security of food and shelter needs. When a young person is worried about where the next meal is coming from or where he or she will find a bed to sleep safely that night, it is almost impossible to even think about educational needs and goals.

Obtaining a college education is often seen as an impossible dream for many youth. Preparing a young person for college is a multiyear process that involves significant support from parents, guardians, and caregivers. Financial resources play a large role in helping youth to prepare college admission packets, tour college campuses, or participate in extracurricular activities to enhance their college application. While youth in foster care are provided for their basic needs such as medical care, shelter, and clothing, this population of youth often do not have the same opportunities to compete academically and may miss out on educational experiences because of their foster care status. Youth in foster care may have multiple foster care and school placements that impact the continuity of learning and academic success.

An unpredictable living situation compounded by poverty often results in an inverse relationship to academic success. Foster youth experiencing poverty may also manifest significant behavior problems. These youths have a multiplicity of challenges in their personal and school lives that may include in-home difficulties, substance abuse, emerging mental health concerns, delinquency, insufficient positive experiences, and social skill deficits. Requirements to pass the required Standards of Learning to earn a general education diploma can create additional pressure to achieve beyond what many of these youth currently see as their capabilities.

In addition, the many demands on the schools and on teachers in particular, coupled with the fact that school faculty may not be aware of the foster circumstance, may prevent these youth from obtaining individualized interventions and accommodations in a timely fashion, especially if they change schools frequently due to placement changes. The youth may fall into a descending spiral of increased behavioral and academic difficulty that eventually ends up with self-destructive thinking patterns and behaviors that may extend into adulthood. Without effective intervention, these youth are at risk for dropping out of school and may face future lives limited by insufficient education. Clearly, these students, who already have suffered to such an extent, deserve much needed help.

About First Star Foster Youth Academies

Imagine: One hundred young adolescents enroll in the ninth grade, bright-eyed and hopeful. Within four years, a whopping 94 of these youths find themselves without the skills, the education, the resources or supports necessary to secure a safe, stable and health future. Twenty-six classmates have failed to graduate high school. Within one year of their 18th birthday, 47 youth are unemployed and 24 are homeless or couch-surfing. Almost half of the boys (44.6%) have become incarcerated. Of the original cohort, only 6 students pursue higher education. Of those, only 3 or 4 may achieve a college degree, if they are lucky. As might be expected, hope evaporates and is replaced by disillusionment, despair, and mistrust.

Now replace imagination with truth: these shocking statistics reflect **reality** for over 400,000 youth in the American foster care system. These youth face different homes, different schools, few opportunities for personalized guidance and support, interruptions in their educational trajectory, and limited financial resources. This is a group truly at risk of missing the benefits of success in higher education and beyond.

First Star is restoring hope for these youth through Foster Youth Academies programs found around the nation. These Academies offer college-focused residential program strategically located on college campuses with monthly follow-up programs. Our students receive superior academic support, enrichment and encouragement to help them prepare for and enter two- and four-year colleges. Thus, the Academies are laying a foundation to improve the likelihood that these youth will seek and attain higher education, good jobs, personal well-being, career advancement, economic independence, and the ability to contribute to society as responsible citizens. This groundbreaking program was first envisioned by First Star Board Member, Dr. Kathleen Reardon, in her book, *Childhood Denied.*

Groups of students from Los Angeles and the state of Rhode Island, entering ninth and tenth grades are participating in Academies on the campuses of the University of California, Los Angeles (launched in 2011), the University of Rhode Island (launched in 2012), and the University of Connecticut (launched in 2013). The First Star Academy on The George Washington University campus in Washington, D.C. commenced operation in the summer of 2012.

Components of the Academies provide a residential environment that includes:

- A 4-6 week residential college stay with highly proficient, experienced staff
- A comprehensive introductory college immersion program
- Undergraduate academic course credits
- Encouragement, motivational training, and Life Skills instruction
- A laptop computer, video camera and comprehensive instruction in self-advocacy and expression through the safe and proficient use of these technologies
- A caring adult network, foster “alumni”, and young adult mentorship
- Superior individualized attention and services
- Integrated, interdisciplinary campus programs and resources
- Access to selected campus services

- Top quality, healthful food services
- Monthly follow up programs and evaluation to prepare for future Summer Immersion sessions (every year through high school graduation).

The Impact of Dr. Given's work on Foster Youth Success

Each of the First Star Foster Youth Academies has experienced much success since the 2011 inception. Hundreds of students in the child care system located Washington, DC, Virginia, Maryland, California, Rhode Island, and Connecticut have already felt the positive impact of how academic success is possible when caring adults, social service agencies and higher education institutions join together to share their knowledge of best practices in education, social-emotional counseling, and family systems. Instead of dropping out of school and becoming victims of the statistics shared earlier, our students are creating videos of how their lives have improved as they prepare to go to the colleges and universities of their choice with pride and self-assurance.

To assist with curriculum, Dr. Given has become personally involved with the students at the Greater Washington Academy, offering presentations on the brain's physiology, development and functions, dendritic activation, learning systems, learning strategies, personal self-management and goal setting. She has shared information how to allow their brains to function most efficiently even under periods of extreme stress, how to prevent cognitive shutdown, and the effects of drugs and alcohol on the human brain. The students better understand and can control the "fight, flight or freeze" responses that have often waylaid their progress in school and in making good choices in their lives. In sharing her own personal story to achieve her academic potential, she offered ways that the students can advocate for themselves with their teachers. The students have become more confident and committed to achieving a college education. To date, they have successfully earned four college credits at The George Washington University and accurately see themselves as college students currently and in the future. Changing self-identification is no small feat, but with Dr. Given's direct intervention and continuous support, the Academy is documenting positive change in this population of students with so many high risk circumstances. The students are accomplishing the goals and objectives established to ensure that they are appropriately ready for the collegiate environment and eventually, independent living as they age out of the foster care system.

The students identify the natural learning systems as they progress through the curricular activities. As they strengthen metacognition practices, they document their progress in their Individualized Learning Plans and self-assessments. Recognizing areas of strength and areas for continued development help them engage in relevant components of the offered events and activities. The following examples demonstrate ways in which the student are taking responsibility for their own learning plans as they participate in Academy seminars, counseling sessions, speaker's forums, instructional classes, and cultural events.

Preparing for Life

Understanding How to Maximize Your Brain Using the Five Natural Learning Systems and Metacognition Practices

- Emotional (Resiliency, Self-Regulation, Confidence, Character, Empowerment, Determination, Adequacy, Power, Balance, Security, Stress Management, Risk Management)
- Social (Trust, Compassion, Leadership, Altruism, Responsibility, Dependability, Relationships, Mentoring, Communication
- Cognitive (Organization, Thinking Skills, Study Skills, Memory Skills, Problem-solving, Time Management, Test-taking)
- Physical (Tai Chi, Teamwork Skills, Ball Skills, Swimming, Yoga, Relaxation, Fitness Practices, Weight Training Basics)
- Reflective (Developing Wisdom, Meditation, Making Connections)

Preparing for Self-Sufficiency

1) Communication (Social Learning System)-negotiation, persuasion, conflict resolution, mediation, problem-solving
2) Math and Literacy Labs (Cognitive Learning System)- reading, writing, reasoning, logic, accuracy, cross connections
3) Recreation Skills (Physical Learning System)- Tai Chi, mediation, yoga, relaxation techniques, stress centering, team sports, swimming, ball skills
4) Financial Literacy (Social and Cognitive Learning Systems)- budgeting, money management, insurance, taxes, credit, fraud, financial aid, scholarships
5) College Preparation(Cognitive Learning System)- admissions, financial aid, counseling
6) Nutrition and Meal Preparation (Physical Learning System)- five food groups, budgeting, optimal health and diet
7) Home Care and Repair (Physical and Social Learning Systems)- basic cleaning, upkeep, small repairs, budgeting, shopping, laundry
8) Health, Safety, & First Aid (Physical, Social, Emotional Learning Systems)- emotional and physical self-protection and healing, identity theft prevention, technology safety
9) Transportation (Social and Physical Learning Systems)- community systems; basic car care, maintenance, and repair
10) Community Service (Social and Reflective Learning Systems)- service learning activities, social activism through literacy projects and videography

Regarding instruction, the Academy directors, mentors, volunteers, instructors, and executive board members embrace the concept promoted by Dr. Given that to be true "teachers" we must become **models** and **mentors, collaborators, facilitators, coaches, and guides**. We believe that students are constant observers of our behavior and they watch carefully to see if our behaviors match our stated beliefs. Children in foster care are often hyper-vigilant and may be suspicious about deceit, untrustworthiness and hypocrisy. We **model** the behaviors and habits we are promoting. We **mentor** the students with weekly check-ins, monthly meetings, and continuous emails, phone calls, and texts. We celebrate the fact that many of our Academy mentors were once in the foster care system

themselves. We **collaborate** with community members, organizations, businesses, agencies, and schools to build a network of supports for our students. We **facilitate** active learning experiences and coach the students through their own self-developed individualized learning plans. We **guide** the students in our care with professional counseling supports, wisdom shared by successful "elders" and inspirational speakers, and engage in gentle conversations when students are problem-solving through their adolescence into young adulthood.

By following the framework recommended by Dr. Given's research, the Academy has been built on a solid foundation that allows for consistent and steady growth and expansion.

Documented Academy Student Academic Progress

University Participation While in High School

- 100% of the students who attended the GWU summer immersion component of the Academy in July 2013 and in July 2014 passed their two-credit classes in Film Reporting and/or Ceramics. For the July 2013 session, 100% (24 out of 24) passed with an A or a B for the Film Reporting course. For the July 2014 session, 100% (21 out of 21) passed with an A or a B in the July 2014 session.
- 89% of the students (26 out of 29) who have participated in the Academy in 2012-2013 and 2013-2014 have started an active university transcript at The George Washington Academy.

  Of the three who were unable to start a university transcript: One student had to leave the Academy in 2013 to attend a residential program due to emotional issues. One student was moved to his Native American tribal community in Utah before he was able to attend the summer session. One student was not allowed to attend the July 2013 summer session by her mother and she moved to South America in April 2014 prior to the start of the 2014 summer session.
  A total of 16 Academy students have achieved four college credits from GWU in the two years since joining the Academy. An additional five new students achieved two college credits in July 2014, and six students earned 2 credits in July 2013, but for a variety of reasons were unable to attend the July 2014 session.

High School Performance

- 89% of the 2013-2014 Academy students (24 out of 27) successfully matriculated into the next grade in high school.
- 66% of the 2013-2014 students achieved a GPA of 2.0 or better in the fourth quarter of the school year 2013-2014. 37% of the students (10 out of 27) carried a GPA of 3.0 or better in fourth quarter, and one-third of the students (8 out of 27) carried a GPA of 2.0 or better in fourth quarter.
- Behaviors and Activities Associated with School Engagement and Success
  85% of the students (23 out of 27) achieved at least 4 out of the 9 factors affecting positive school behavior and academic success

27 students **10 (active) BOYS** **13 (active) GIRLS** **4 students out of program**	passing quarterly grades	grade improvement in at least one core content class	Participation in an honors or advanced class	completion of a service learning event	participation in extracurricular clubs or organizations	participation in athletics at school or community	participation in specialty programs or charter school (such as fine arts)	matriculation to the next grade in high school	ongoing increases in perseverance, commitment to finish a task, sustained	**TOTAL**	**Percentage**
1	X	X	-	X	-	X	x	X	X	7	78
2	-	X	-	X	-	x	x	X	X	6	67
3	X	X	-	-	X	X	x	X	X	7	78
4	X	x	x	-	X	-	x	X	X	7	67
5	-	-	-	-	-	-	x	-	X	2	22
6	X	X	-	-	-	-	x	X	x	5	56
7	X	X	-	-	-	-	X	X	X	5	56
8	-	X	-	X	-	-	x	-	X	4	44
9	X	X	-	-	-	x	X	X	X	6	67
10	X	X	X	X	X	X	X	X	X	9	100
11	X	X	-	X	-	-	x	X	X	6	67
12	X	X	-	X	-	-	x	X	X	6	67
13	-	X	-	-	-	-	x	-	X	3	33
14	X	X	-	-	-	-	X	X	X	5	56
15	X	X	-	-	-	-	x	X	X	5	56
16 data pending	?	?	?	?	?	?	x	?	x	2	22
17	X	X	X	X	-	-	x	X	X	7	78
18	X	X	-	X	X	-	X	X	X	7	78
19	X	X					x	X	X	5	56
20	X	X					x	X	X	5	56
21	X	-	-	X	-	-	x	X	X	5	56
22	-	X	-	-	X	-	x	-	-	3	33
23	X	X	X	-	X	X	x	X	X	8	89
24	X	X	-	X	X	-	x	X	X	7	78
25	X	X	-	X	X	-	X	X	X	7	78
26	X	X	-	X	X	-	X	X	X	7	78
27	X	X	-	X	-	-	X	X	X	6	67

Internal and External Assets Development- Protective Factors and Behaviors for Success

Based on results of the Developmental Assets Profile survey results (dated 7/30/2014), Academy students indicated increases since July 2013 in the following areas:

- Empowerment (9% increase since July 2013) - **student feels safe across many contexts, and valued and respected by others. This is associated with reduced risk of depression, suicidal and self-injurious behaviors, and violence.*
- Boundaries and Expectations (8% increase since July 2013)-**student reports consistently clear rules and consequences at home, school, and in the neighborhood, plus positive role models among friends, family, and outside the family. This asset category is most strongly and consistently related to a variety of youth outcomes, particularly high academic achievement. Low scores on this scale suggest a significant lack of these important assets and are associated with increased risk of depression, suicidal behavior, and antisocial behavior among all youth.*
- Commitment to Learning (18%) - **high scores reflect high degree of reported motivation to learn and active engagement in learning both in and out of school. High scores are powerfully related to academic achievement and are protective against school failure, dropout, and school-related behavior and discipline problems. Low scores are associated with poor academic performance, under-achievement, and increased risk of dropout and school-related problems, as well as antisocial behavior among males.*
- All five context areas- Personal, Family, Social, School, Community (17%)

The two highest areas of improvement were an 18% increase in Commitment to Learning, and a 24% increase in total School context (assets related to the school environment, relationships with teachers, and attitude toward school.

EXTERNAL ASSETS:

- **50%** of our students indicate they have moderate to abundant **support** assets that are experienced strongly and/or frequently in support areas such as adult support, advice, help, and caring.
- **65%** of our students indicate they have moderate to abundant **empowerment** assets to feel safe, valued, and have useful roles.
- **60%** of our students indicate they have moderate to abundant **boundaries and expectations** assets, such as peer and adult role models, clear rules, fair school rules, monitoring and teacher and parent encouragement.

INTERNAL ASSETS:

- **65%** of our students indicate they have moderate to abundant **commitment to learning**, such as caring about school, enjoying learning, feeling motivated, encouraged and engaged.
- **50%** of our students indicate they have moderate to abundant **positive values**, such as standing up for beliefs, serving others, taking responsibility, healthy habits, avoiding alcohol, respecting others, helping solve problems, and valuing honesty.

- **50%** of our students indicate they have moderate to abundant **social competencies**, such as building friendships, resisting pressure, avoiding unhealthy events, planning ahead, resolving conflicts, accepting and being sensitive to others, and expressing feelings.
- **48%** of our students indicate they have moderate to abundant **positive identity,** such as feeling in control, positive self-esteem, managing frustration, overcoming challenges, having a sense of purpose and believing in a good future.

CONTEXT AREAS:

- **58%** of our students indicate they have moderate to abundant **personal** assets, as related to positive values stated above.
- **58%** of our students indicate they have moderate to abundant **social** assets, as related to social competencies stated above.
- **63%** of our students indicate they have moderate to abundant **family** assets, as related to empowerment assets stated above.
- **68%** of our students indicate they have moderate or abundant **school** assets, such as teacher encouragement, engaged learning, motivation, caring school, clear school rules, safe at school, fair school rules, and completion of homework.
- **48%** of our students indicate they have moderate or abundant **community** assets, such as safe neighbors, good neighbors, involvement in religious, sport, club, or group activities, community service opportunities, and creative activities.

Year One (2012-2013) of the Academy focused on successes in building a strong personal foundation to build trust, positive expectancy, healthy habits of mind and body, increased understanding of learning processes, increased social bonds with healthy adult mentors and peers who have also experienced the foster system, improved commitment to personal growth, confidence in ability to be self-sufficient and self-protective, improved self-advocacy, career awareness and exploration, and increased motivation to do well in school in order to attend college.

Year Two (2013-2014)of the Academy focused on successes in :

1) dramatic academic improvement, involvement in school clubs, sports, extracurricular activities, increased attendance rate, and decreased or no disciplinary referrals. The goal included targeted tutorial support, continuous communication with school personnel, coordination between school and Academy activities and interventions, and increased connections to academic supports, such as the online curriculum, volunteer tutors and mentors.
2) dramatic community engagement, such as community service opportunities, deeper connections to George Washington University and other local institutions of higher learning, deeper understanding of political and legal advocacy resources, partnerships with regional cultural, environmental, and arts clubs (Arts Club of Washington, Arena Stage, National Aquarium, and constructive use of time (nutrition training, basic first aid and health, and independent living preparation).

We look forward to the years ahead as hundreds, and then thousands, of Academy students are shepherded off to a successful experience at an institute of higher learning and out of the foster care milieu and mindset. We are depending on Dr. Barbara K. Given to continue to guide our thinking, expand our knowledge, increase our compassion, and build our wisdom. We know that with her dedicated direction and boundless energy, we will level the playing field for youth in foster care so that every brain is nurtured, protected and cherished.

RESUME

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EDUCATION

1955: Associate of Arts (Liberal Arts), Colorado Women's College, Denver, Colorado

1958: Bachelor of Science in Elementary Education, Kansas State University, Manhattan, Kansas

1967: Master of Education in Mental Retardation, University of Oregon

1974: Doctor of Philosophy in Education of the Exceptional (minor in school psychology), The Catholic University of America, Washington, D.C.

PROFESSIONAL EXPERIENCE

1955-1968: Teacher of: second grade; classes for the retarded; and/or graduate student.

1969-1970: Director of Special Education, Principal, and Instructor in Pediatrics, John F. Kennedy Institute, Johns Hopkins Hospital and University, Baltimore, Maryland.

1970-1972: Graduate Teaching Assistant, The Catholic University of America.

1972-1973: Teacher of Children with Learning Problems, Fairfax Public School Division, Fairfax, Virginia.

1974-1979 & 1988-90: Chair, Special Education Teacher Preparation Programs, George Mason University (GMU), Fairfax, VA.

1974-2002 1974-1977, Assistant Professor; 1977-2002, Associate Professor, GMU.

1974-84; 89-95: Coordinator, Learning Disabilities Teacher Preparation Program, GMU.

1980-1983: Co-Director, Dean Bowen's Mainstreaming Project, funded by the U.S. Office of Education.

Sum, 1981& Sum 1983: Acting Assistant Dean, College of Professional Studies, GMU.

1987-2007: Director, Center for Honoring Individual Learning Diversity (CHILD); one of 30 International Centers.

1988-1995: Director, Education Study Center, Graduate School of Education, GMU.

1989-1992: Project Director, Learning Disabilities Certification Project, A U.S. Office of Education grant.

1997: Became a faculty researcher at the Krasnow Institute for Advanced Studies

2000: Retired from the Graduate School of Education.

2000-2005: Director, Adolescent and Adult Learning Research Center, Krasnow Institute

2006: Retired

2006- current: Associate Professor Emerita of Special Education, Graduate School of Education

PUBLICATIONS:

Books:

- Given, B. K. (2002) The brain's natural learning systems. Alexandria, VA: Association for Supervision and Curriculum Development.
- Given, B. K. (2000). Learning styles: A guide for teachers and parents, revised. Oceanside, CA: Learning Forum.
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- Given, B.K., Tyler, E., Hall, N., Wood, M., Johnson, W., Cabrera, E., Esterbrook, R., Free, W., Little, L., Thompson, A., & Wheeler, P. (1999 Spring). Tactual resources at the college level: Toys for adult learners. Journal of Accelerative Learning and Teaching, 24(1-2). Available at: http://TEC.camden-rutgers.edu/JALT. Also, published by ERIC Documents
- Given, B. K., Knight, D., Patrick, S., & McGuire, N. (1999/2000) Personality types and learning styles of college freshman. National Forum of Applied Educational Research Journal, 13(1), pp. 23-49.
- Given, B. K. (1998). Psychological and neurobiological support for learning style instruction: Why it works. Reprinted in National Forum of Teacher Education Journal, 8(2), pp. 10-15.
- Dunn, R., Given, B., Thomson, B.K. & Brunner, C. (1997). The international learning-styles network: Where, who, when, what, where, why --and why not? National Forum of Applied Educational Research Journal,11(1), 26-29.
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- Given, B.K., (1990, May). Integrated strategies instruction: A new concept in teaching. Phi Delta Kappa, George Mason University Chapter 1368 Newsletter, 1-2.
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- Given, B.K. & Houck, C. (1981). Status of SLD programs: Indications from a teacher survey. Learning Disabilities Quarterly, 4, 320-325.

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- ____ (1998, May). School lunches and learning: A school board disconnect. Wisconsin School News, 52(1), 8-15.
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- ____ (1997, September). Emotional learning: Getting back to the basics. Wisconsin School News, 52(5), 8-19.

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- ____ (1996, April). Accelerate with style. Learning Beyond Frontiers (Deutsche Gesellschaft fur Suggestopadisches Journal. Eichenstr.13, 85457 Horlkofen, Germany: Lehren & Lernen) pp 19-20.
- ____ (1996, March). Mild learning disability or learning style difference? ERIC Clearinghouse on Disabilities and Gifted Education. ED 395 431.
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- Given, B.K., Lannen, S., Nicholson, M. & Reid, G. (1995). Snippets on Learning Styles. Bridges. 2(2), 41-42.
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- Given, B.K., Winters, J. & Yates, J. (September, 1994). Fauquier County Public Schools Special Education Report. George Mason University, Fairfax, VA: The Institute for Educational Transformation.

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- Given, B. K. (2006). Learning styles as theaters of the mind. European Learning Styles International Network Conference, Oslo, Norway.
- Schiff, S., Kruglikov, S. Chari, S., Rapp, P. Weinstein, S. & Given, B. (July 2006). Fully Optimized Discrimination of Physiological Responses to Auditory Stimuli. **CNS**: Cognitive Neuroscience Society Edinburgh, UK
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- ____ (1998, May). Learning styles may answer meddlesome school board members. The School Administrator, 55(5), p. 46.
- ____ (1998/April) Learning styles make a difference. Journal: Ohio School Boards Association, pp. 12-18.
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RADIO INTERVIEW:

•Aug. 25, 2005: Long-distance interview for Their Voice on WCHB in Detroit. Interviewer: Angelo Henderson on What Parents Need to Know about Learning Styles.

GRANT ACTIVITY:

- Congressional Earmark for $298,050 funded through the U. S. Department of Education for continuation of phonemic awareness and reading research at the Adolescent and Adult Learning Research Center. Through September 2006.
- Oct 2002 - Sept 2005: Congressional Earmark for $400,000 for continuation of the Youth of Promise research on adolescents with receptive language and reading deficits
- June 2001 - Sept 2005: Congressional Earmark for $921,000 funded through the U. S. Department of Education for continuation of research at the Adolescent Learning Research Center on youth with receptive language, reading, and behavior disorders.
- Sum 2000 - July 2005: Congressional Earmark for $693,750 funded through the U. S. Department of Education to initiate an Adolescent Learning Research Center and conduct the Youth of Promise Project,
- Fall 2000-Dec 2004: Field Initiated Research award for $449,863 from the National Institute for Disability Research and Rehabilitation to extend the research on receptive language in middle school students,
- 1998-1999: $40,000 grant from the Krasnow Institute for Advanced Studies, $4,000 plus a research assistant from the Graduate School of Education at GMU, $51,000 in software from the Scientific

Learning Corporation, $50,000 in computer work stations from the Computer Curriculum Corporation, and 24 surplus computers from GMU for a pilot study regarding the use of digitized speech for improving academic achievement of middle school students with receptive language disorders. Combined awards total more than $144,000.

- 1996-1997 & 1998-1999: Two small grants were obtained from New Century College for $2,000 and $1,500 respectively for data collection and analysis of data pertaining to learning styles and personality types of college students.
- 1976-1995: Secured OSERS and VA Ed Dept Program Development grants and served as Principal Investigator for four major projects. ($550,000) plus several local and University grants over several years time for special education program development.

Poster Sessions:

- Leonard, C. M., Eckert, M. A., Lombardino, L. J., Given, B. K., Eden, G. F. (2001) Two anatomical phenotypes for reading disability. Cognitive Neuroscience Society.
- Brown, C., Jones, K., Zeffiro, T. Given, B., Eden, G. (2000). Functional magnetic resonance imaging of phonological processing in reading-disabled children. Cognitive Neuroscience Society.
- Given, B. & Yaghmour, E. (2000, Feb 18) Phonemic awareness in adolescents: A poster session. International Learning Disabilities Association Conference, Reno, NV.
- Zeffiro, T., Brown, C., Jones, K., Given, B., & Eden, G. (2000). Visual motion processing in reading-disabled children. Cognitive Neuroscience Society.

INTERNATIONAL PRESENTATIONS

- (2008, April 17-18) Using the Brain's Natural Learning Systems When Teaching Reading. Frankfurt International School, Oberursel, Germany. The Brain, Learning and Applications Spring Conference
- (2008, April 17-18) Strategies for Creating A Classroom Learning Community. Frankfurt International School, Oberursel, Germany. The Brain, Learning and Applications Spring Conference
- (2008, April 17-18) The Brain's 5 Natural Learning Systems. Frankfurt International School, Oberursel, Germany. The Brain, Learning and Applications Spring Conference.
- (2008, April 15) Learning Styles: Manifestations of the Brain's Natural Learning Systems. The Central Organization of Teacher Trainers for Teachers with Special Needs. Helsinki, Finland
- (2008, April 14) The Brain's 5 Natural Learning Systems. Teachers from Swedish Schools Association. Helsinki, Finland
- (2007, Jan 13). Teaching the way the brain learns: The most essential component for success. International Alliance for Learning Conference, Austin, TX.
- (2007, Jan 12). The state of research in accelerative learning. A panel presentation. International Alliance for Learning Conference, Austin, TX.
- (2006, June 12). Using the brain's natural learning systems and a learning styles framework for lesson planning and instruction. European Learning Styles Information Network (ELSIN) 2006 Conference. Oslo, Norway
- (2006, June 9). Keynote: Learning Styles and the Brain's Natural Learning Systems. St. John's University's International Learning Styles Institute. Orlando, FL
- (2006, Mar 24) Validation of a reading model based on struggling to expert adolescent and adult data. International Conference on Advances in the Internet, Processing, Systems, and Interdisciplinary Research. Amalfi, Italy.

- (2006, Jan. 16). Teaching to the Brain's Natural Learning Systems. Presented for 4,000+ Manila educators at the Conference Center in Manila, Philippines.
- (2006, Jan 14, 15). Teaching to the Brain's Natural Learning and Leadership Systems. Presented at the First International Leadership Styles Conference in Baguio City, Philippines. (Two presentations; 1,300 and 300 audience participants)
- (2005, Jan 15). Quantum Learning and Literacy: A New Concept in Motivational Instruction. Presented with Bobbi DePorter. International Alliance for Learning Conference. Atlanta, GA.
- (2005, Jan 14). Teaching Based on How Individuals Learn. International Alliance for Learning Conference. Atlanta, GA.
- (2004, Sept 17). Brain behavior and learning styles of middle school low and expert readers. Summer University all-day lecture and workshop, University of Helsinki. Finland.
- (2004, Sept. 16). Brain behavior and learning. Two hour workshop for the Finland Learning Styles Center.
- (2004, July 31). Learning styles and theaters of the mind. St. Johns University International Learning Styles Institute, New York City.
- (2003, July 13). Reading research and learning styles. St. Johns University International Learning Styles Institute, New York City.
- (2003, May 25). Phonemic awareness intervention for adolescents with low reading skills. Athens Institute for Education and Research, 5th International Conference on Education.
- (2003, April 10). Self-administered, computer-driven, information processing assessment for adult literacy instruction. 21st Century Learning CAL '03 Conference. Queen's University Belfast, Northern Ireland.
- (2002, July 17). The brain's natural learning systems. Learning Conference, Beijing, China.
- (2002, July 1). Using learning styles for effective training in the insurance industry. Day-long workshop for Research and Development, Alagemeen Burgerlijk Pensioenfonds/The Academy, Heerlen, The Netherlands (Holland).
- (2002, June 26-28). The overlap between brain research and research on learning styles. Ghent University, Ghent Belgium.
- (2002, May 11). Teaching to the Brain's Natural Learning Systems. Learning and the Brain Conference, Hyatt Regency Cambridge Hotel, Boston.
- (2002, May 8). Assessing Strengths of Low Literacy Adults. Center for International Rehabilitation Research Information and Exchange (CIRRIE) Conference, Wyndham City Center Hotel, Washington, D.C.: A NIDRR sponsored conference.
- (2002, Jan). Moderator for the Education Research Panel. Presented one workshop on the Brain's Natural Learning Systems. International Alliance for Learning Conference, Houston, TX.
- (2001, Jan 11-14). Moderator for the Education Research Panel and the Corporate Research Panel. Served as a panelist on the ADHD Panel. Presented one workshop on the Brain's Natural Learning Systems. Developed a closing activity for the conference. International Alliance for Learning Conference, Orlando, FL
- (2000, Jan 14) Research on accelerative learning: A panel discussion. International Alliance for Learning. Atlanta, GA
- (1999, July 21) Decreasing learning disabilities through learning styles instruction. International Association of Special Education, Sydney, Australia.
- (1999, July 19). Phonemic awareness training for adolescents: Is it too late? International Association of Special Education, Sydney, Australia.
- (1999, July 8) The psychology and neurobiology supporting learning style instruction. St. Johns University International Learning Styles Institute, New York City.

- (1999, February 24). The effects of phonemic awareness training on adolescent limited-readers. Learning Disabilities Association International Conference, Atlanta, GA.
- (1999, January 16). Accelerative learning and research. Invited keynote. International Alliance for Learning Conference, Woodlands, Houston, TX.
- (1998, July 10). The mind, the brain, and learning styles. St. Johns University International Learning Styles Institute, New York City.
- (1998, March 13). Brain-Based Learning Systems and How to Use Them. Learning Disabilities Association International Conference, Washington, D.C.
- (1998, January 16). The Neuroscience of Learning: Use It or Lose It. International Alliance for Learning Annual Conference. Irvine, CA.
- (1997, April 4). Neuroscientific support for learning styles instruction: An effective approach for students with mild dyslexia. Fourth International Conference of the British Dyslexia Association, York, England.
- (1996, March 6). Neuroscientific basis for learning styles instruction. Learning Disabilities Association International Conference, Dallas, TX.
- (1996, January 13). How the brain constructs its own knowledge. Learning Disabilities Association Conference Orlando, FL.
- Plus numerous presentations from the Fall of 1974- Dec 1995.

NATIONAL PRESENTATIONS

- (Aug 3, 2006). The Brain's Theaters of the Mind. Invited speaker for the Brain and Learning Conference, Nashville, TN
- Keynote Address: (2006, Jan 10). The Role of the Brain's Natural Learning Systems for Mental Health Leaders. National Mental Health Association, Hilton Hotel, Clearwater, FL.
- (2005, Apr 3). Teaching to the Brain's Natural Learning Systems. Association for Curriculum and Development Orlando, FL.
- (2005, Jan 29). Investigating Double Deficit Theories of Dyslexia at the Middle School Level: Results of An EEG Reading Research Project. TRLD, San Francisco, CA.
- Keynote: (2000, June 15). Keynote: Teaching to the Brain's Natural Learning Systems. Breakout session: Implementing a Learning System's Framework. Quality Education Systems Conference, Dallas, TX.
- (1999, Oct 15). Phonemic Awareness: Is It Too Late for Adolescents? National Council for Learning Disabilities Conference. Minneapolis, MN.
- Keynote Address. (1999, Oct 14). The brain's learning systems. International Alliance for Learning Midwest Conference, Minneapolis, MN.
- (1999, June 18). Learning disability or learning style difference? Breakout session. Quality Education Systems Conference, Dallas, TX.
- Keynote: (1999, June 17). The neurobiology of learning systems. Quality Education Systems Conferences, Dallas, TX
- (1997, April 25). School board members: Learning and leadership styles. 57th National School Boards= Association Annual Conference, Anaheim, CA
- Keynote presenter, June 27, 1996). Learning styles in education. National School Boards Association, Trainers Annual Conference. Denver, CO.
- Plus numerous presentations between 1974 – 1996.

REGIONAL PRESENTATIONS WITHIN VIRGINIA AND

THROUGHOUT THE U.S., AUSTRALIA AND NEW ZEALAND

- (Mar 14, 2007) Brain 101. GovMark Council, The Ritz-Carlton, Tysons Corner, VA for O'Keefe and Company.
- (May 12, 2006). Learning and Working Styles. Alexandria Public Librarian's Staff Development Workshops, Beatley Central Library, Alexandria, VA.
- (May 4, 2006). Teaching to the adult brain. Virginia Association of Adult and Continuing Education 2006 Conference, Virginia Beach Resort Hotel and Conference Center.
- (2005, Aug 30). Presented two breakout sessions of 40 minutes each for the above workshop. Title: Know Your Learning Preferences So You Can Know Your Students.
- Keynote: (2005, Aug 30). Teaching According to How the Brain Learns. 1.5 hour keynote for Prince William County adult literacy administrators and teachers held at J. Sergeant Reynolds Community College, Richmond, VA.
- (2005, Mar 17-18). Teaching to The Brain's Natural Learning Systems. Conference on Learning and Teaching for Kentwood Public Schools, Kentwood MI. Held at Aquinas University. A 2-day workshop.
- (2004, May 26). Growing Up with A Learning Disabilities: Been There, Done That. Fairfax County Speech and Language Association. After dinner speech.
- (2000, Mar 25). Phonemic awareness training for adolescents: The jury is still out. Virginia Dyslexia Association, Richmond, VA
- (2000, Mar 4). Research: Is Phonemic Awareness Training for Adolescents Effective? Virginia Council for Learning Disabilities and Learning Disabilities Association combined conference. Richmond, VA
- (1999, Nov. 13). Phonemic awareness training for adolescents: Is it too late? Learning Disabilities Association of Virginia Annual Conference, Richmond, VA.
- Keynote. (1999, Oct. 16). Accelerating learning through application of brain research. Regional Alliance for Learning Conference, Bloomington, MN.
- (1999, Oct. 7). The role of phoneme awareness in reading disabilities. Bermuda Learning Styles Center. Invited presenter.
- (1999, Aug 18). Brain behavior and learning styles. In-service staff development workshop. Kentwood Public Schools, Kentwood, Michigan.
- (1999, Aug 4). Brain research that supports learning styles instruction. Blockhouse Bay School, Auchland, New Zealand.
- (1999, Aug 2). Brain research that supports learning styles instruction. Whakamaru Primary School, New Zealand.
- (1999, July 27). With Glenn Cappelli, Enhancing learning through learning styles instruction. St. Joseph's School, Perth, West Australia.
- (1999, July 26) What brain research says about teaching and learning.: A workshop for educators. Northam West Australia.
- (1999, April 15). Brain research and learning. Franklin Middle School, Fairfax, VA.
- (1999, April 8). Learning strategies for elementary students. Hunt Valley Elementary School, Springfield, VA.
- (1999, February 10). Neurological bases of learning styles. The Katherine Thomas School, Rockville, MCD.
- (1998, December 3). Brain research and learning: What parents and teachers need to know. North Springfield Elementary School Parent, Teacher Association, Springfield, VA.
- (1998, October 31). Why learning starts in the stomach. Learning Disabilities Association of VA, Richmond, VA.

- (1998, October 30). The neurobiology of learning styles. Maryland Association of Special Education Facilities, Baltimore Convention Center, MD.
- (1998, June 18). Brain research that supports the Dunn and Dunn learning style model. Quality Education Systems annual conference, Dallas, TX.
- (1998, April 13). Teacher collaboration with SUCCESS. Orange Hunt Elementary School faculty, Fairfax VA.
- (1998, February 24). What parents need to know about brain research and learning. Spring Hill Elementary School Parent Teacher Association, Fairfax, VA
- (1997, November 6). Learning styles workshop. Prince William County Instructional Support Team, Department of Curriculum and Staff Development. Manassas, VA.
- (1997, October 25). Homework styles. Fairfax County Parent, Teacher, Student Association Annual Extended Family Solutions Conference. Fairfax High School, Fairfax, VA.
- Keynote. (1997, August 29). Application of brain research to teaching students with learning disabilities. Faculty orientation for the Lab School of Washington, Washington, D.C.
- (1997, April 24). The brain, chaos and the classroom. . Fairfax County Public Schools, Title I teachers. Lacey Instructional Center, Fairfax, VA.
- (1996, December 10). A celebration of the human brain. Fairfax County Public Schools, Title I teachers. Lacey Instructional Center, Fairfax, VA.

LOCAL, Selected GMU and OTHER UNIVERSITY PRESENTATIONS

- Understanding the Reading Brain (June 3, 2010). Alexandria City Family Academy, Alexandria, VA
- Teaching to the Brain's Natural Learning Systems (Feb 18, 2010). Alexandria City Family Academy, Alexandria, VA.
- Keynote. (Aug 30, 2006). Teaching to the Theaters of the Mind. Alternative Education Summer Institute for Teachers and Administrators, Bryant Alternative Education Center, Fairfax, VA.
- (Oct 28, 2004). Middle School Phonemic Awareness Project: Comparison of Low and Expert Readers. Learning in Retirement Institute, GMU.
- (Oct, 2004). Teaching to the Brain's Natural Learning Systems in Adult Education. Guest lecture.
- (Oct, 2003). The brain's natural learning systems and adult education. Guest lecture.
- (April 2003). Middle School Phonemic Awareness Project: Comparison of Low and Expert Readers. Krasnow Institute for Advanced Study Lecture Series.
- (2002, October). Teaching multi-cultural students through their natural learning systems. University of North Dakota, School of Communication, Educational Foundations and Research distance learning class.
- (2001, Fall). Brain Camp: Report on the Youth of Promise Project. GMU Retirement Institute, Tallwood.
- (2000, Mar 27). Receptive language training: Research results. Invited presentation for the Krasnow Institute Board of Trustees. Krasnow Institute, GMU.
- (1999, Nov. 22). Phonological awareness training for adolescents: Is it too late? Krasnow Institute for Advanced Study Seminar Series, George Mason University.
- (1999, Nov. 15). Teaching reform through brain research. Marymount University Alumni Professional Development Seminar, Loudoun Campus, VA. Invited keynote presenter.
- There were 3 presentations for Harold Chu's classes and 2 for U-TEEM.
- (1999, May 19). The brain and learning styles. EDUC 805, guest presenter.
- (1998, May 5). Panel presentation: What are learning disabilities? GMU Board of Visitors for the Affirmative Action Committee. Mason Hall, GMU

- (1997, November 25). Exploring Fast ForWord as a viable research effort. Krasnow Institute for Advanced Studies, GMU.
- (1997, November 13). What is a learning disability? CAS and GMU University Equity Office Workshop for Faculty. GMU.
- (1997, August 20). Learning styles and implications for university teaching. GMU New Faculty Orientation. Johnson Center, Fairfax, VA.
- (1996, October 25). Brain research for educators. EDUC 805, guest presenter.
- (1996, August 23). Learning styles and implications for university teaching. New Faculty Orientation, Johnson Center, GMU, Fairfax, VA.

PROFESSIONAL AFFILIATIONS AND SERVICE:

- Volunteer tutor; GED student, Seaport Foundation (summer 2008)
- Volunteer teacher; Juvenile Detention Center, Alexandria City Public Schools (fall & summer 2009)
- Virginia Coalition of Special Educators for Personal Preparation (Chair, 1986-1988)
- Learning Disabilities Association (LDA); International Conference, Washington, D.C. Conference Program Co-Chair 1996; Professional Advisory Committee elected to 3 year term 1997; LDA National Conference Program Committee, 1997.
- Council for Exceptional Children (CEC): CED, DLD, and TED.
- Council for Learning Disabilities (CLD) and former member of Virginia Executive Board & VA Newsletter Editor (1993-1995).
- National Learning Foundation, current member and Executive Board Member, 1993 to 1996.
- International Alliance for Learning (IAL), current member. Member, Executive Board & Newsletter Editor (1995-1997).
- Association for Supervision and Curriculum Development. Associate member.
- Phi Delta Kappa. GMU Chapter, current member and Research Director (1994-1995)
- International Learning Styles Network, Executive Board Member (1987 to present)
- Director of the Center for Honoring Individual Learning Diversity (1987 to present).
- Served on the Doctoral Dissertation Award Committee for St. John's University (Fall 2000).

LATEST UNIVERSITY SERVICE

- Graduate School of Education Faculty Evaluation Committee, 1998-2000.
- GSE, Advanced Studies in Teaching and Learning, Planning Committee, 1998-1999.
- GMU Bookstore Committee, 1998-1999.
- Active member of the GMU Speakers Bureau.
- Co-Chair, The Krasnow Institute/GSE Symposium: Intersection between Neurobiology and Education, Airlie Conference Center, Warrenton, VA
- Director, Center for Honoring Individual Learning Diversity, a collaborative effort among metropolitan area colleges and public school divisions; An Affiliate of the International Learning Styles Network

AWARDS AND HONORS:

- Honored as Associate Professor Emerita of Special Education upon retirement in 2007 from GMU.
- Appointed Faculty Affiliate, Krasnow Institute for Advanced Study status upon retirement from GMU

- Graduate School of Education awarded one graduate research assistant for 1998-1999, and one for 1999-2000.
- Finalist in the 2000 George Mason University Teaching Excellence Award competition.
- George Mason University Distinguished Faculty Award. Graduate School of Education, 1992.
- Granted a study leave for Spring term, 1997
- Selected for inclusion in several Who's Who publications including:
    - Who's Who in American Education, 1974
    - Outstanding Americans, 2000
    - Who's Who in American Women, 2003, 2006-2007
    - Global Who's Who, 2007
    - Who's Who in America, 2008, 2009
- George Mason University Honoree for Scholarly Success, 1983.
- Recognition of Meritorious Service to the Mentally Retarded Children of Lane County, Eugene, Oregon, 1962.

Member or former member of the following education honor fraternities and professional organizations:

- Delta Tau Kappa, 1955, Colorado Women's College
- Kappa Delta Pi, 1975-1978
- Phi Delta Kappa, 1976 to 2007.
- Association for Supervision and Curriculum Development
- International Alliance for Learning
- International Learning Styles Network
- Learning Disabilities Association
- International Dyslexia Association
- Council on Exceptional Children: Behavioral Disorders; Learning Disabilities; Teacher Education divisions.

Barb's Story

My journey toward writing this book began as a child when I struggled to read. I was sent to work with the custodian in sixth grade whenever the class had reading and I was enrolled in the Junior High Opportunity Class (class for the retarded) when school began in seventh grade. Thank goodness, we moved to a small rural community where there was no such class. Eventually, I was reading at the beginning second-grade level upon entering tenth grade. I was very proud of myself for having read a whole book during that previous summer, but I soon realized that tenth grade was going to be just as difficult as the other years. Nonetheless, I persevered and gained ground in reading. As a result, I completed an Associate of Arts degree from Colorado Women's College, a Bachelor's degree in Elementary Education at Kansas State University, a Master's degree in mental retardation at the University of Oregon, and a Ph.D. in Education of the Exceptional at The Catholic University of America. My minor area of study was psychology. And, to my great surprise, I was given commendations for the defense of my dissertation – the first one awarded in several years, I was told. While in my doctoral program, Ideal School Supply Company published *Alphabet Cue Cards, a* version of my *Sounds and Shapes from A to Z* illustrated picture book. With Gavin Reid, I co-authored *Learning Styles: A Guide for Teachers and Parents* in 1999 and revised it in 2000. *Teaching to the Brain's Natural Learning Systems* (2002) is my major publication plus numerous articles in refereed journals and professional publications as well as many educational reports and grant applications.

I began my teaching career in 1955 and have taught all ages and levels of students with cognitive functioning from seriously mentally retarded to gifted and from second grade through doctoral level students. I initiated the Special Education Teacher Preparation Program at George Mason University (GMU), Fairfax, Virginia in the fall of 1974. The irony is that I was the first in my extended family to go to college.

Things went well. I was the first member of the Education faculty to submit and receive a U.S. Department of Education federal grant. Monies received were to expand the newly initiated Special Education program and its faculty. My methods of teaching psycho-education assessment were gaining a positive reputation in surrounding school divisions, and the Board of Visitors asked me to submit my papers to move from Assistant to Associate Professor earlier than expected.

While at George Mason, I received awards for research and teaching and received University, State and Federal grants for our program. After learning about a grant to work with the National Association of Secondary School Principals to study the application of learning styles to teacher preparation, I became co-director of the Southeast Learning Styles Center with leaders from Fairfax County Public Schools. As part of this experience, I attended training programs in Bernice McCarthy's 4Mat program and in the Dunn and Dunn Learning Styles Model. I learned a great deal from the Dunn and Dunn Model that propelled me into a deeper learning mode regarding how the brain functions. Together with leaders from the Fairfax County Public Schools, we conducted annual brain conferences for six years. Nonetheless, I was unhappy with how I was preparing teachers. I was doing what my former professors had done; I was professing – talking and talking and talking. Oh, I had great PowerPoint visuals but I had little enthusiasm for what I was doing, because I knew it wasn't how I learned best.

In my thirst for knowledge and skill development, I attended many conferences on the relationship of brain behavior and learning; I met Bobbi and QL's Chief Learning Officer, Mark Reardon, at the Society for Accelerated Learning and Teaching Conference held 1989 in Chicago. I was enormously impressed with Mark's presentation and asked Bobbi if I could visit SuperCamp during the summer. Her warm welcome propelled me to fly to Boston and present myself at the program. I liked what I saw and

subsequently developed an on-campus practice teaching summer program based on Quantum Learning concepts that ended when Fairfax County Public Schools initiated summer programs for students with learning disabilities and/or emotional disturbances.

Simultaneously, with leaders in the Fairfax County Public Schools we conducted six annual on-campus *Brain and Learning* conferences. I finally felt comfortable with my QL inspired revised manner of teaching and offered an elective course based on the need for teachers to know themselves before they can understand their students. Student ratings for this class were the highest I had received and I knew I was on the right track. Unfortunately, it was an elective course and the Virginia State Department of Education would not approve it as satisfying a requirement for Special Education certification, so it was dropped.

After retiring from the Graduate School of Education, I was invited to join the research faculty at the Krasnow Institute for Advanced Studies at GMU where I wrote and directed research grants and served as the co-director of the Adolescent and Adult Learning Research Center. I retired in 2007 and am now busy writing and, with my son, renovating a 104-year-old building to fashion *Stoplight Gelatto Café* in Richmond, Virginia. Since working in a soda shop as a teenager, I've always wanted to have an ice cream parlor. Now, I'll be the oldest "soda jerk" in town. In addition to my son, I have a married daughter, a great son-in-law and a wonderful puppy. My life is really, really good.

Program Description of the First Star Greater Washington Academy

The First Star Greater Washington Academy provides an intense year-long program to approximately 30 male and female foster youth in high school g who live in the Northern Virginia and Washington, DC regions. The program provides these participants with the academic support, enrichment and encouragement needed to help them become competitive applicants for subsequent admission to 2- and 4-year colleges. The program also provides grade-appropriate information regarding higher education by offering intense monthly meetings throughout the school year. The Academy presents students with a preview of the collegiate experience through participation in a rigorous 4-week residential summer immersion experience at George Washington University. Other features of the program include superior individualized attention and services through a caring adult network, foster "alumni" now attending local colleges and universities, and extensive youth-adult mentorships. Youth accepted into the program are carefully supervised, and on-campus visits provide access to a variety of programs, resources and services.

The Academy uses best practices from the First Star UCLA Bruin Guardian Scholars Academy program, the First Star University of Rhode Island Academy, and the First Star University of Connecticut Academy, as well as San Pasqual Academy in San Diego, California, the Children's Project in Santa Barbara, California, SEED Public Charter School in Washington, DC, the Milton Hershey School in Hershey, Pennsylvania, and the Eagle Rock School in Estes Park, Colorado.

An individualized learning plan with personal goals is developed for each participant, based on specific needs and interests indicated from initial and survey information. The personal goals include intellectual, emotional and physical strength, endurance, and health as each participant gains insights into the relationships between the brain, the body, and the learning processes. Instruction focuses on development of metacognitive skills, attribution or ownership of behaviors, cause and effect relationships, and internal locus of control. Throughout each day and evening, participants have leadership opportunities to build self-worth, community service to foster citizenship, behavior guidance to promote responsible learning, and thematic experiences to develop purposeful learning.

The program engages students in a variety of fun and active learning opportunities that support improvements in overall psychosocial functioning, educational outcomes, and self-sufficiency. Typical activities include academic trainings and seminars, tutoring, literacy and mathematics skills laboratories, independent study, monitored group study hall, adult mentorship, financial literacy workshops, supervised free time, transitional living and life skills workshops, presentations by university and community guest speakers, individual therapeutic and peer support groups, service learning (e.g., volunteer work and job shadowing), and social/cultural activities (e.g., concerts, plays, museums, amusement parks, and films).

The program launched in September 2012 with an intensive 2-day, 1-night challenge program at The Edge in Manassas, VA. Throughout the school year, staff members are meeting monthly with participants to evaluate individual progress, ensure successful generalization of the newly acquired knowledge and skills, and gather data for overall program assessment.

Unique Features

The First Star Greater Washington Academy brings together several community agencies to improve the manner in which these partners interact, network, plan, and build community infrastructure. Engaging Academy students and families on a personal level makes each professional relationship a poignant and valuable experience. This results in more open, creative, and collaborative communications among Academy partners and families.

As these college-bound students succeed in school and acquire personal confidence in their ability to live independently, the community can expect cost savings by reduction in serious disciplinary events, court involvement, special education services, mental health interventions, substance abuse treatment, unemployment, and other social concerns. Over the long term, the community can expect to see higher rates of steady employment, stable families, and active citizenship by the foster youth on a life trajectory of happy and healthy success experiences. Students are welcome to remain in the Academy even when reunification has occurred, further aiding permanency outcomes in their lives. The long-term relationships with the Academy mentors and other caring adults add beneficial stability to their adolescent experience, thus enhancing positive mental health and beneficial coping skills.

Several innovative components of the Academy make the lasting impact of this successful program unprecedented in foster care interventions:

- The Academy fosters genuine mentoring relationships for multiple years with young adults, several of whom were once in foster care or have overcome difficult circumstances; these previous foster youth now in college act as role models for success for the Academy students.

- Students are fully immersed in the college experience by the curricular inclusion of college credit courses and the experience of actually living on the university campus for a month, and Academy students obtain a university transcript.

- Students are assisted with personalized "wraparound" services and supports with monthly activities throughout the school year, a protected private social network, and communication among peers, program staff, school faculty, tutors, volunteers, families, and foster care liaisons.

- Students are provided personal laptops and camcorders that they keep after successful completion of one full year in the program. With this technology, they create short video films and essays that share their personal stories in deeply moving genres.

- The daily program includes many evidenced-based best practices and training that promote social and emotional well-being by increasing protective factors, including: the Leadership and Resiliency Program (LRP), Leadership Style Inventory (LSI), Positive Behavior Supports (PBS), cooperative learning and collaboration, reciprocal peer tutoring, Quantum Learning 8 Keys of Excellence, the Writer's Workshop, and the Transitions Framework.

- Students engage in local community outreach service activities, including participation in "Generation On", a global youth service movement, and service learning experiences to build empathy and resiliency.

- Students are exposed to inspirational guest speakers, including representatives from community human services agencies and organizations, such as the courts, juvenile justice, substance abuse treatment programs, mental health services, public schools, and higher education.

- Students engage in carefully administered resiliency-enhancing activities that acknowledge how traumatizing events can be utilized to build positive personal strengths.

Reinforcing resiliency is a major component of this program and enables students to approach new opportunities with an internal foundation for success. It requires a deep understanding of how individuals can use adversity and suffering as a springboard for vital management of life experiences that will allow the youth to grow and prosper. One crucial element of sustaining resiliency is to build the capacity to care for self and others. Action born of compassion and empathy is integral to the process. As students develop self-awareness and confidence, they are able to distinguish between healthy and unhealthy risk behaviors. They learn how taking appropriate risks to improve life for themselves and others is a signature trait of successful "change agents."

Academy Objectives

Academy Objective One: Improve Academic Achievement:

(1) Provide academic courses that increase students' literacy and math skills.
(2) Motivate students to study and improve academic performance.
(3) Teach students study skills, focus and time management skills that will improve school performance and prepare them for college.
(4) Teach how the brain develops and various manifestations of intelligence.
(5) Encourage a "college-going" mentality.
(6) Introduce role models who have achieved academically despite life challenges.
(7) Develop a sense of being a part of the host college/university.
(8) Teach how to take standardized tests effectively.
(9) Support students in choosing and applying to colleges.
(10) Teach how to leverage learning resource centers and advisors.

Academy Objective Two: Increase Skills in Self-Efficacy and Independent Living

(1) Develop students' confidence that they can succeed in college.
(2) Increase student awareness of steps they can take to assure acceptance to college.
(3) Help students embrace doing well in school and in extracurricular activities.
(4) Teach students to advocate for themselves now and in their future endeavors.
(5) Teach students about achieving financial independence.
(6) Facilitate students successfully obtaining financial aid for college.
(7) Teach consequences of behavior.
(8) Encourage students to assume responsibilities at school and at home.
(9) Teach students to become leaders and encourage leadership.

Academy Objective Three: Increase Health and Safety Practices

(1) Improve students' understanding of the link between health (mental and physical) and succeeding in college and careers.
(2) Teach students how to keep themselves healthy through exercise and relaxation.
(3) Teach students learn how to manage stress.

(4) Teach students the importance of nutrition and how to select and prepare healthful foods.
(5) Motivate students to make daily decisions that facilitate health.
(6) Engage students in activities and decisions that improve health and prevent illness.
(7) Teach protection from dangerous situations, including identity theft.

Academy Objective Four: Increase Career Awareness, Aspirations, and Preparation

(1) Introduce students to a range of career options available to college graduates.

(2) Through peer counselors and role models, help students recognize their potential as well.
(3) Help students identify among their interests and skills ones that can lead to productive careers.
(4) Familiarize students with college courses and selecting major/minor areas of study.
(5) Introduce students to guests whose careers are examples of viable options.
(6) Foster understanding of mentor relationships and how they help careers.
(7) Teach working effectively with others and about organizational sensitivities/politics.
(8) Encourage entrepreneurial activity and creative thinking.

Academy Objective Five: Encourage Positive Character Traits and Positive Communication Skills

(1) Teach the importance of developing positive character traits, including resiliency, integrity, generosity, courage and honesty.
(2) Introduce students to people who exemplify these character traits.
(3) Teach the importance of first and subsequent impressions in college and job interviews.
(4) Provide communication, persuasion and negotiation skills that facilitate positive relationships.
(5) Engage students in activities that teach effective expression of their ideas to others.
(6) Teach working in teams, collaborating on projects and learning from each other.

Academy Curriculum

1. **Preparing for Life**
    - Understanding How to Maximize Your Brain Using the Five Natural Learning Systems and Metacognition Practices
        - Emotional (Resiliency, Self-Regulation, Confidence, Character, Empowerment, Determination, Adequacy, Power, Balance, Security, Stress Management, Risk Management)
        - Social (Trust, Compassion, Leadership, Altruism, Responsibility, Dependability, Relationships, Mentoring, Communication
        - Cognitive (Organization, Thinking Skills, Study Skills, Memory Skills, Problem-solving, Time Management)
        - Physical (Tai Chi, Teamwork Skills, Ball Skills, Swimming, Yoga, Relaxation, Fitness Practices, Weight Training Basics)
        - Reflective (Developing Wisdom, Meditation, Making Connections)
    - Preparing for Higher Education
        - Dorm Life Success
        - Navigating the Campus
        - Application Process, Essay Success Tips, “Look Fors”

    - Financial Aid, Work Study, Scholarships, FAFSA, Budgeting
    - Responsible Choices
- Preparing for Independent Living
    - Financial Management (Budgeting, Insurance, Purchases, Savings, Taxes
    - Preventing Identity Theft and Fraud
    - Housing Tips
    - Transportation Options
    - First Aid Basics
    - Safety Basics
    - Community Resources
    - Healthy Choices
- Preparing for Self-Sufficiency
    - Home Care and Repair Basics
    - Clothing/Laundry
    - Automobile Care/Maintenance/Repair Basics
    - Savvy Shopping Tips
    - Developing and Maintaining Healthy Relationships
- Preparing for the World of Work
    - Job Interview Basics
    - Dressing for Success
    - Successful Employee Traits and Practices
    - Career Choices and Exploration (Military, Human Services, Community- Based, Education, Legal Fields, Arts and Entertainment, Food-Based Fields, Sciences, Ecological, Politics, Medical, Engineering, Business, Entrepreneur, Religious, Technology)

2. Literacy Enrichment

- Writing Workshop
    - Journal Basics
    - Vocabulary Development
    - Writing for Fun
    - Writing at the College Level (What to Expect, Typical Requirements, Grading Rubrics)
    - Persuasive Writing Techniques
    - Purposeful Writing
    - Inspirational Writing
    - Writing with "Punch" and Clarity
- Reading Workshop
    - Reading for Pleasure
    - Reading for Knowledge
    - Reading for Specific Skill Development
    - Reading for Advancement
    - Reading for Social Connections

3. Mathematics Enrichment

- Patterns and Graphing
    - Maps, Charts, Statistics, Representations for Real Life
    - Math Mysteries in Nature
- Number Sense & Math Reasoning

        - Mental Math Fluency, Relaxing with Math
    - Practical Math for Everyday Living
        - Calculating for Budgeting, Transportation, Salary, Taxes, Living Expenses, Discretionary Purchases
    - Preparing for High School Mathematics
4. **Arts Enrichment**
    - Social Media and Videography Arts
    - Visual Arts
    - Music
    - Dance
5. **Nutrition Instruction**
    - Basic Cooking and Nutrition with Five Food Groups
    - Developing Skills in Teamwork, Organization and Self-Reliance
6. **Physical Health Education**
    - Healthy Recreation and Leisure Activities
    - Tai Chi Basics
    - Brain Gym — Connecting Brain and Body Functions
    - Yoga Basics
    - Relaxation Techniques
    - Releasing Stress

Curriculum Details

Theme One- Understanding Who We Are

Theme One helps students orient themselves to the possibilities surrounding them through better understanding of how they think and learn. We discuss elements that promote learning as well as factors that can distract the learner from optimal concentration and retention of information. We discuss basic information about how the human brain works and how students can master techniques for regulating the brain and body. As part of this, Tai Chi and Brain Gym are introduced to help students focus their thoughts and behaviors. Specific training on the Five Natural Learning Systems (Emotional, Social, Cognitive, Physical, and Reflective) by Dr. Barbara Given sets the framework upon which all the other seminars are based. Super Camp/Quantum Learning training by Dr. Bobbi De Porter exposes students to "8 Keys to Excellence."

During the first stage, students navigated a university campus and become familiar with campus facilities, dorm life, and scheduled events and activities. Students are instructed on the appropriate use of the assigned laptops and camcorders in order to begin immediately to prepare their "Story" of who they are. At the conclusion of the program, students present a video film that relays to others important messages about how they see themselves and what is important to them as a result of this experience. Daily journal writing records students' thoughts and opinions and are used to flesh out their messages.

A challenge course was offered early in the program to encourage teamwork, trust, organization, strategic planning, and goal accomplishment through a series of challenging outdoor activities. Students must work together to complete the course and engage in "coopetition"- a combination of cooperation and competition.

Inspirational speakers offer personal experiences and life lessons that are further discussed in small group seminars. Six main personal traits are highlighted during the first stage:

- Character- What is personal character and how do we develop it?
- Trust- How do we learn to trust others wisely? How do we become more trustworthy? How do we handle betrayal of trust?
- Leadership- What makes a superb leader? How do we develop these skills and behaviors in our own lives?
- Resiliency- What are the key elements to coping successfully with stress, adversity, and life challenges?
- Determination- How do we plan and achieve our goals regardless of our circumstances?
- Altruism- How do we promote the belief that acting for the benefit of others is right and good?

At the conclusion of the first stage, students participated in a mask-making activity originally introduced by the work of Dr. Barbara K. Given, in which they explored and discussed questions such as the following:

- What masks do I wear? Why and when do I wear different masks? What do my masks say about me?
- What masks do other people wear and why? How can these masks help or hurt a situation? Are there times when masks are necessary?
- Who is the authentic self behind the masks? Can I see behind a mask? Can others see the real "me" despite my mask?
- What role have physical masks played in cultures around the world?

Theme Two- Preparing for Self-Sufficiency

Theme Two focuses on several life skills necessary for eventual independent living. Students identify the learning systems being used in each category of skill development. Workshops include:

11) Communication (Social Learning System)- negotiation, persuasion, conflict resolution, mediation, problem-solving
12) Math and Literacy Labs (Cognitive Learning System)- reading, writing, reasoning, logic, accuracy, cross connections
13) Recreation Skills (Physical Learning System)- Tai Chi, mediation, yoga, relaxation techniques, stress centering, team sports, swimming, ball skills
14) Financial Literacy (Social and Cognitive Learning Systems)- budgeting, money management, insurance, taxes, credit, fraud, financial aid, scholarships
15) College Preparation (Cognitive Learning System)- admissions, financial aid, counseling
16) Nutrition and Meal Preparation (Physical Learning System)- five food groups, budgeting, optimal health and diet
17) Home Care and Repair (Physical and Social Learning Systems)- basic cleaning, upkeep, small repairs, budgeting, shopping, laundry
18) Health, Safety, & First Aid (Physical, Social, Emotional Learning Systems)- emotional and physical self-protection and healing
19) Transportation (Social and Physical Learning Systems)- community systems; basic car care, maintenance, and repair

20) Community Service (Social and Reflective Learning Systems)- service learning activity with homeless

Theme Three- Careers, Careers, Careers Everywhere

An explosion of career choices greets students during the third stage of the Academy. Students learn which careers will productively cater to and utilize natural psychological needs, such as power, attention, adequacy, and risk. Representatives from a wide variety of work fields speak with students about job requirements, benefits, drawbacks, and why they chose their work. Students engage in interest inventories to match their strengths and interests to specific careers. They learn tips to get and keep a desired position through successful interview skills, social behaviors and personal development. They receive information on dressing for success in the workplace. Small group exercises share tips on how to manage stress at work and how to attain promotions and increased leadership opportunities. Students have the chance to frame a life plan using 5-year increments to visualize the future. At the conclusion of the week, students visit Washington, DC, to explore how various career fields have created the American culture we know today.

As in previous weeks, students tie the career education component back to the natural learning systems and 8 Keys to Excellence. They continue developing their personal stories through the videotaping and journal writing experience.

Theme Four- Community Services Are There For You

The fourth stage focuses on the concept that the greater Washington, DC and Northern Virginia regions are "home" for these students. Discussions center on the idea that as citizens of the county or city in which they live, students belong here as contributing members of our society. As such, they have a right to know about and be able to access community services and resources. Visualizing themselves as future college students allows them to see admittance to a university as a truly achievable goal. A visit to the Capitol illustrates how becoming politically knowledgeable can help them become effective "change agents" to ensure that cultural norms work for everyone's benefit. In evening seminars, students receive information on community resources, organizations, and activities that may be of interest to the students currently or in the future.

Significant time is spent connecting all the experiences of the previous weeks to the original framework of developing emotional, social, cognitive, physical, and reflective well-being and competence. Students evaluate their growth through documentation in their individualized learning plans. They articulate changes in their psychosocial development, life skills, and educational plans. They report how they plan to use the 8 Keys to Excellence and other trainings they received in the Academy in their upcoming high school experience.

Students are counseled about the possible impact of completing the program as both joyful and somewhat sad. Students may feel loss about ending the daily camaraderie they established with the Academy staff members and peers. The students are trained how to use the protected social network in order to continue their supportive friendships. They are assured that this experience is just the beginning of long-term and beneficial relationships with people who really care about them and are committed to their success.

Each year, the students participate in the summer immersion session closing ceremony to celebrate their achievements and to hear from others the value they bring to the Northern Virginia and Washington, DC regions, to their schools, and to their friends and families. The lifelong process of

looking inward for personal growth and looking outward to find one's place in the world continues to be guided and practiced throughout the years.

[i] The Adoption and Foster Care Analysis and Reporting System (AFCARS) Report, U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, available at http://www.acf.hhs.gov/sites/default/files/cb/afcarsreport20.pdf (estimates as of Nov. 2013).

[ii] Id.

[iii] National Center for Education Statistics, Digest of Education Statistics: 2012 (table 8), available at http://nces.ed.gov/programs/digest/d12/tables/dt12_008.asp?referrer=report (2012).

[iv] Foster Care by the Numbers, Casey Family Programs, Sept. 2011, available at http://www.casey.org/media/MediaKit_FosterCareByTheNumbers.pdf

[v] Calculated by dividing estimated number of inmates, 231, by the confined population of 100,000. See Todd D. Minton, Jail Inmates at Midyear 2013 - Statistical Tables, U.S. Department of Justice, Office of Justice Programs, May 2014, available at http://www.bjs.gov/content/pub/pdf/jim13st.pdf.

[vi] Courtney, M., Dworsky, A., Brown, A., Cary, C., Love, K., Vorhies, V. (2011). Midwest evaluation of the adult functioning of former foster youth: Outcomes at age 26. Chicago, IL: Chapin Hall at the University of Chicago.

[vii] Id.

[viii] World Bank, World Development Indicators Database, Total GDP 2011, at 1, http://databank.worldbank.org/data/views/reports/tableview.aspx (2012).

[ix] . Calculated by finding average of unemployed former foster youth males (60%) and females (62%) at age 19. See Hook, J. L. & Courtney, M. E. (2010). Employment of Former Foster Youth as Young Adults: Evidence from the Midwest Study. Chicago: Chapin Hall at the University of Chicago.

[x] Calculated by finding average of unemployed former foster youth males (54%) and females (53%) at age 24. See Hook, J. L. & Courtney, M. E., Employment of Former Foster Youth as Young Adults: Evidence from the Midwest Study. Chicago: Chapin Hall at the University of Chicago (2010).