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Becoming a Brilliant Star:

An Introduction

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You never know a line is crooked unless you have a straight one to put next to it.

Socrates

The life which is not examined is not worth living.

Plato

If you are planning for a year, sow rice; if you are planning for a decade, plant trees; if you are
planning for a lifetime, educate people.

Chinese Proverb

Talk does not cook rice.

Chinese Proverb

Abstract

This paper provides an overview of the Brilliant Star model of human growth and development. The background for the need to develop a comprehensive model is offered as well as a description of the model's ten domains and two core elements. The Brilliant Star model is a systems-based, ecological model that proposes a need to identify the knowledge, attitudes, and skills required for successful adulthood as well as the important contextual factors that influence an individual's development.

Becoming a Brilliant Star: An Introduction

What does it take to be a successful adult in the 21st century? Exactly what does success mean? Financial wealth? Career achievement? Inner peace? Developing one's potential to the fullest? How should the family, the school, religious organizations, and community guide the development of the knowledge, attitudes, and skills necessary for such success? These important questions are the focus of discussions in the United States and around the world. With the rapid social and cultural changes that have become commonplace throughout the past century, these questions have become increasingly difficult to answer definitively.

Developing Individual Potential

It is becoming increasingly apparent that society must consider the education of our young people from a more holistic perspective. Over the past 100 years education has been equated with schooling, but it is much more. Education refers to the twin processes of developing an individual's potential and the development of the knowledge, attitudes, and skills that provide for the continued development of a society or culture. This two-part definition of education raises questions about the purpose of an individual's life and highlights the need to consider the massive changes in the latter half of the twentieth century that have pushed humanity into a new era of human civilization: a global, information age.

Beliefs regarding human purpose are fundamental to the development of people's worldviews (McCarthy, 1992). Some believe that human beings are a product of nature, that nature is their creator, and that their purpose is to adapt to the requirements of nature (Liebes, Sahtouris & Swimme, 1998). Others believe that human beings are created by God with souls that will continue to exist after the human body no longer functions (Copan, 2001; Danesh, 2001). While many scientists agree with the former position (Larson & Witham, 1998), the vast

majority of the general public supports the latter (Gallup, 1993; Gallup International, 1999). This difference in fundamental beliefs presents an obstacle to formulating a congruent statement of purpose that can provide a foundation for cooperative functioning among the social institutions responsible for the education of children and youth.

There are those who advocate that science should be the sole source of information about human nature and potential. If one believes that human beings are simply a node on the web of life (Capra, 1996) and a biological accident (Gould, 2002; Wilson, 1978), then the answer is fairly simple. Human nature is equivalent to biology as expressed in a specific environmental context; the purpose of a human being is an expression of biological potential. From this perspective, science is the final arbiter of human potential. On the other hand, if one believes, as do some scientists (Templeton & Giniger, 1998), that human beings have a spiritual component to their nature that continues to exist after the biological body ceases to function, then the purpose of this life must include at least the preparation for that existence. In this case, religion becomes a critical source of information. Other sources of information about human potential exist in the writings of philosophers and historians and practitioners of the arts; these can also be used to guide the investigation of the purpose of human beings.

An important aspect of the approach advocated in this paper is to show respect for differing sources of knowledge and opinions, especially in public discourse and institutions. While science is the primary resource for the views expressed in this paper, Kagan (2000) expressed skepticism that psychology and other sciences have discovered valid principles and theories of human behavior. After all, these sciences are only a little over 100 years old. Compilations from the major world religions (e.g., Huitt, 1998; Scholl, 2002; Wilson, 1991) are

available that address many of the issues discussed in this paper. Resources are also available from the perspective of philosophy (Huitt, 1999a) and historical exemplars (Huitt, 2004).

Developing Social Capital

The rapid movement to the information age presents a challenge requiring careful reflection regarding the necessary knowledge, attitudes, and skills related to success, however it is defined. It took thousands of years for the agricultural age to replace the hunter/gatherer lifestyle that dominated early humanity. It then took only several hundred years for the industrial age to become dominant (Huitt, 1995). However, it has taken mere decades for the information age to become paramount. In 1900, approximately 70% of Americans found work in the agricultural and industrial sectors of the economy; only 30% worked in the information and service sectors. By 1950 the workforce was evenly split between these two. However, at the beginning of the 21st century only 13% of the American workforce found employment in the agricultural and industrial sectors, with more than 50% working in the information sector. This rapid shift to the information age means that the prerequisites for adult success have changed dramatically. It also means that many of the social structures and institutions that paved the way for success at the beginning of the twentieth century are now outdated.

In 1993, Bennett proposed that an analysis of cultural indicators showed the American culture to be in decline. For example, in spite of increased production in the U. S. economy, and expanded social spending during the previous 30 years, including a 550% increase in monies for social spending and a 225% increase on schooling, measures of indicators of cultural health declined while rates of violence, illegitimate births, suicide rates, and divorce increased. Though some would argue there is no common standard for evaluating moral issues (Nash, 1997), even a cursory glance at these types of data provide most people with enough evidence for a need to

consider how to improve the current state of educating our children and youth (Gallup, 1975, 1980; Rose & Gallup, 2000). Additional support is provided by researchers who have documented the decline in social capital—the connections and networks among individuals and social institutions that facilitate cooperative action—in the latter half of the twentieth century (Coleman, 1988; Putnam, 2000).

From Reductionism to Organicism and Living Systems

An important starting point for a reflective analysis of the changing social conditions and their impact on desired knowledge, attitudes, and skills is the worldview through which data are analyzed and theories constructed. Within science, the dominant vision or worldview throughout most of the twentieth century was based on a “reductionistic,” mechanistic philosophy of science based on Newtonian physics and developed during the prior three centuries (Capra, 1996). This replaced a more holistic, living-systems-oriented view at the center of the hunter-gatherer and agricultural-based ages in which all human beings lived until the 18th and 19th centuries. During these earlier ages, people’s lives were dominated by natural cycles. They moved with the migratory food source and gathered food as it was available; planted in spring, harvested in fall; awoke at daybreak and quit work at sunset. People also developed relationships in natural ways, through family, neighbors, and tribes. This holistic, multi-dimensional perspective was the American perspective from the time of the first indigenous peoples crossing the land bridge from Asia, through the landing of the first Europeans, to the beginning of the dominance of industry in the last part of the 19th century (Damon, 2002).

The movement to the industrial age was to some extent precipitated by the adoption of the “reductionistic” paradigm, not only by scientists and entrepreneurs, but also by ordinary people. For example, with oil and electricity, people could extend their daylight activities into

the night. Specialization increased and peoples' lives became more fragmented. In short, people's lives were separated and divided. At the same time, the average lifespan increased, per capita income rose, and a myriad of other factors showed the power of the mechanistic, reductionistic worldview to change people's lives.

The adoption of the reductionistic approach led researchers to focus on changes in specific aspects of human beings over a relatively short time period (Heath, 1980). Social roles or parts of people's lives, such as being a parent, a worker, or a citizen, could be considered independently without considering the total pattern. Individuals could be analyzed apart from family; family could be isolated for study separately from community; school could be disconnected from work and livelihood. Effects could be studied in terms of minutes, days, or weeks rather than seasons or years.

Post-modern society is caught in a conflict of its own making. Analyzing success by breaking phenomena into their parts and considering each part separately has allowed humanity to make great strides in addressing significant problems. Science made it possible to be more specific in analyses of important human phenomena and more detailed in explaining cause-effect relationships. Unfortunately, when it comes to facilitating human development, it is sometimes easier to focus attention on what can be measured rather than what is important. For example, there is a major push for academic accountability, especially as measured by high-stakes standardized tests, so that students can be better prepared for the workplace of the twenty-first century (Huitt, 1999b). While it is true that educational attainment is correlated with income (Bureau of the Census, 1990), research has demonstrated that other factors such as optimism, empathy, social skills, and moral character are also important for adult success (e.g., Damon, 2002; Goleman, 1995; Heath, 1994; Seligman, 2002). In fact, these other factors may be twice as

important as traditional measures of intelligence and educational attainment (Gardner, 1995; Sternberg, Wagner, Williams & Horvath, 1995).

The preparation of children and youth for success in the adult world is spread over multiple institutions. While this has always been the case, these institutions often have competing worldviews and agendas. For example, it is recognized that the family has a significant responsibility for children's social, moral, and emotional development while schools have a similar responsibility for academic achievement (Bridge, Judd & Moock, 1979). However, the lines of influence are often blurred. During the 1990's exemplary school-based moral character development programs have been developed (Huitt & Vessels, 2003), while parents increasingly chose homeschooling as an option for their children (Bauman, 2002). As previously mentioned, a major source of conflict among institutions responsible for child and youth development is the relationship between religion and public schools. While children who regularly attend religious services have higher academic test scores (Etzioni, 1984), there is confusion as to how public educational institutions should address spirituality and religion (Segars & Jelen, 1998). Another example of conflict arises in terms of standards for student performance. While there is some advocacy for world class standards of excellence for students (Haynes & Chalker, 1997), most state departments of education promote minimum standards (American Federation of Teachers, 1999). For some parents, this minimum competency is not what they want for their children and they select other schooling options (Merrifield, 2000).

As important as is academic achievement, there is a need to be guided by a more holistic paradigm when considering the development of children and youth. Rather than a singular focus on a narrow representation of academic achievement as a predictor of future success, with the school accepting major responsibility for its development, the individual should be considered

from a multidimensional perspective, and multiple social institutions and experiences should be recognized as contributing to each person's development. There is also a need to encourage children and youth to strive for the highest standards of excellence while recognizing that each individual is likely to present a profile of competence across the many domains of development.

Brilliant Star Model

The Brilliant Star model has been developed to address the major dimensions of a holistic approach to individual development based on an organismic, systems approach as exemplified in the philosophies of Whitehead (1929) and Lazlo (1996). It is similar in purpose to models developed by Benson, Galbraith and Espeland (1994), Chickering and Reisser (1993), Ford (1987), Heath (1980, 1991), and Jordan and Streets (1973).

Pinker (2002) provided a relatively simple starting point by naming "mind" and "behavior" as the essence of the human being and identifying nature and nurture as the key influences. By nature, Pinker was referring to one's genetic structure, and by nurture he was referring to environmental influences. However, even a superficial examination suggests this model is much too simple. For example, Sahtouris and Lovelock (2000) report that DNA, the building blocks of genetic material, can respond and react to influences from the environment. That is, genetic influence is not static, but acts dynamically in response to events outside of the organism. This simple fact calls into question the linear, reductionistic model that is the basis for much of the current discussion about human development.

The pioneering work of Jordan and his colleagues (e.g., Jordan, 1979; Jordan & Streets, 1974; Raman, 1975) stated that human beings need to develop competencies related to their biological and psychological potential. They categorized the psychological potentials into five categories: (1) psychomotor, (2) perceptual, (3), cognitive, (4) affective, and (5) volitional, and

defined “man’s essential nature in spiritual rather than material terms” (Jordan & Streets, p. 291). Heath (1991, 1994) suggested that an individual needs to demonstrate capacities in the areas of cognition (knowing and reasoning), values, self-concept, and interpersonal relations. Chickering & Reisser (1993) proposed an even more complex set of dimensions and suggested that healthy development progresses along seven vectors: (1) competence (including the cognitive and interpersonal relations suggested by Heath and adding physical and social); (2) managing emotions (one aspect of interpersonal relations according to Heath); (3) autonomy (including both emotional and instrumental independence); (4) establishing identity (similar to Heath’s self-concept domain); (5) interpersonal relationships (a combination of the social and interpersonal domains identified by Heath); (6) developing purpose (future direction, who am I? Where am I going?); and (7) developing integrity (a consistency of beliefs and action, requiring one to clarify values). Writers of popular self-help books such as Waitley (1986) and Ziglar (1991) also recognize the need to view human beings multi-dimensionally.

Core Elements and Domains

I propose there are two interrelated categories of human competence (intrapersonal / internal and interpersonal / social) and three core elements (spiritual, moral character, and personal style). The three core elements are considered central to inter- and intrapersonal competencies because they support and are influenced by the domains comprising these categories:

- Spiritual—deep and significant relationships to self, to others, to nature, and to the major unknowns of the universe, including its origins and the origin of life. This may or may not include a relationship with a Supreme Being or Creator.

- Moral character—the knowledge, attitudes, and skills related to reasoning, valuing, committing to, and habitually acting in accordance with standards of right and wrong;
- Personal Style—conceptions of temperament, intelligence, learning style, and personality that describe individual differences related to preferences in the intrapersonal and interpersonal domains.

The intrapersonal category consists of five domains that derive from the work mentioned above as well as that by psychologists such as Hilgard (1980) and Mayer (1995) (see Figure 1):

- Physical/psychomotor—wellness of the body, especially in terms of body composition and body functioning (e.g., cardiovascular fitness, muscular strength and endurance, and flexibility) as well as specific psychomotor skills;
- Awareness/perceiving—the initial conscious awareness or understandings derived from activation of the senses;
- Cognition/thinking—the development of a knowledge base and reasoning skills such as creative and critical thinking;
- Affective/emotion— affective functioning such as emotional stability and the development of empathy and conscience;
- Conative/volition—involves setting goals, developing plans, and putting plans into action

The interpersonal domains include areas in which the individual is expected to demonstrate social competencies (see Figure 2):

- Family—involves successfully working with one's family and establishing and maintaining a family of his or her own;

- Friends—establishing and maintaining a network of friends;
- Career—developing and sustaining a career or occupation;
- Finances—obtaining the necessary finances to sustain a desirable lifestyle;
- Social—making a contribution to society through involvement and leadership in social and cultural activities.

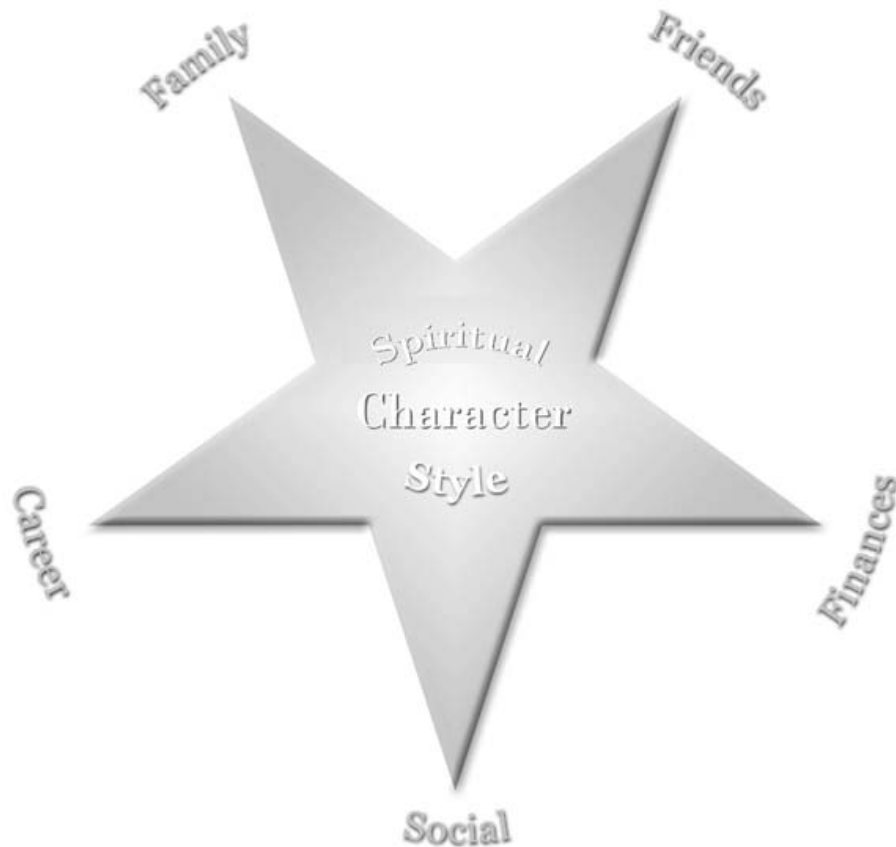
Figure 1. Interpersonal Domains and Core Elements of the Brilliant Star Model



An important principle regarding the functioning of these domains and core elements is that the whole is more than the sum of its parts. While it is important to identify the parts, it is vital to pay attention to the functioning of the whole. Bandura (1986, 1997) describes this type of relationship as “reciprocal determination.” That is, one can neither fully consider character

without considering all of the domains nor fully consider cognition, affect, or conation without considering each of the others as well as the core elements. Mustakova-Possardt (2004) suggests *critical moral consciousness* as the phenomena of study when all of these domains and core elements are considered simultaneously.

Figure 2. The Interpersonal Domains of Becoming A Brilliant Star



Another principle of a systems approach is that systems are embedded within systems and are, in turn, composed of systems. Vandervert (1993) asserts that brain, mind, behavior, and environment consist of a holistic unity; one component cannot be understood outside of the relationship with the others. Koestler (1967) termed each system a “holon” and the structure of “holons” a “holarchy.” This principle is demonstrated when considering the individual as comprised of mind, body, and spirit with the mind considered in terms of perception, cognition,

affect, and volition (as shown in Figure 1 above.) Alternatively, the cognitive component might be considered in terms of analytical, creative, or practical intelligence (Sternburg, 1988). It could just as easily be considered in terms of perception, processing, storage, and retrieval of information (Neisser, 1967). The individual can be considered as a part of a family, the family as part of a neighborhood or community, the community as part of a society, and the society as part of a global civilization (see Figure 3).

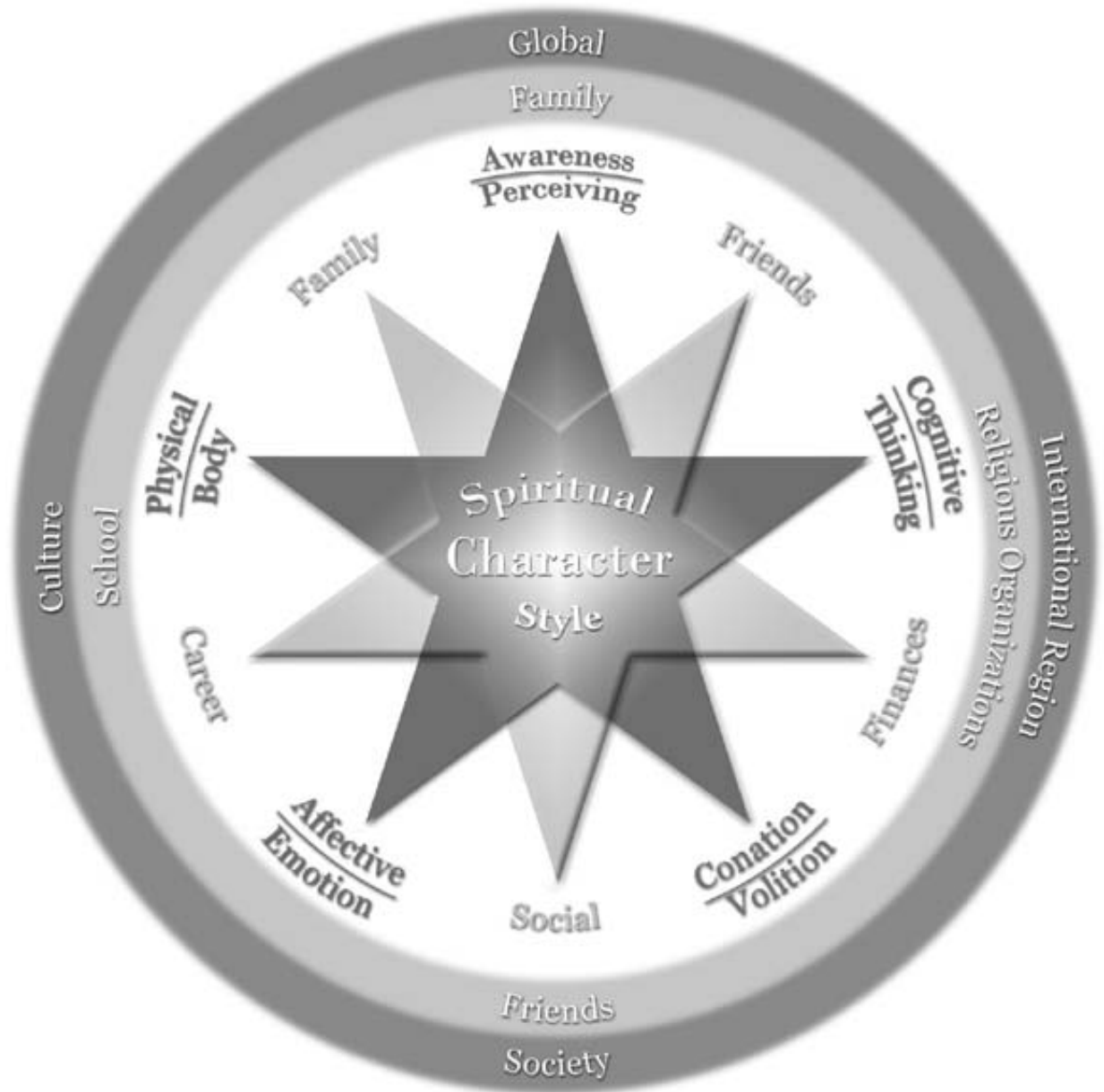
Figure 3. A holarchy of personal development



Using Bronfenbrenner's (1979, 1989) concept of the ecology of development, the environment can be considered in layers, from the microsystem that has the most immediate influence to the macrosystem where the influence is more ambiguous and less precise. In the Brilliant Star model, family, friends, school, and religious organizations are more in the nature of microsystems while society, culture, international region, and the entire planet are considered macrosystems (see Figure 4). As previously mentioned, the connections and networks among individuals and social institutions that facilitate cooperative action, labeled social capital by a

number of researchers such as Coleman (1988) and Putnam (2000) is an important component of this ecology.

Figure 4. The Brilliant Star Model



The full model then consists of the ten domains and three core elements as well as the developmental ecology within which the individual lives and develops. This perspective is similar to the model of developmental assets proposed by the Search Institute (Scales & Leffert,

1999). In the Search Institute model, adolescents need to have an environment that is conducive to development (labeled external assets), and acquire a set of knowledge, attitudes, and skills required for successful passage through adolescence into adulthood (labeled internal assets). The twenty external assets are specific factors of social capital provided by the family, school, neighborhood, and community (including religious organizations and adult role models) and must be taken advantage of by the adolescent. These are arranged in four categories:

1. support—access to a caring and supportive family, school, etc.;
2. empowerment—access to useful roles and opportunities for service;
3. boundaries and expectations—high and congruent across the different contextual influences; and
4. constructive use of time—including fine arts and sports or other extra-curricular activities as well as at home.

The twenty internal assets, which are specific factors of human capital (Coleman, 1988), are also grouped in four categories:

1. commitment to learning—focus on doing well in school and reading for pleasure;
2. positive values—exhibits behavior associated with moral character including caring, justice, integrity, honesty, responsibility, and restraint;
3. social competencies—including interpersonal and cultural competencies and skills in peaceful conflict resolution; and
4. positive identity—including high self-esteem and a sense of purpose as well as a sense of personal power and a positive view of the future.

The Brilliant Star model includes each of these with the addition of assets identified in additional domains. For example, the model includes the domains of physical wellness and

spiritual development that might be inferred in the Search Institute model, but are not explicit. Additionally, the Brilliant Star model includes a more extensive ecological level relating to social, cultural, regional, and global influences. This is not in conflict with the Search Institute (or for that matter, other models by Chickering and Reisser (1993), Ford (1987), Heath (1980, 1991), or Jordan & Streets, 1973). The Search Institute model emphasizes the mediation role that connects these macro-level influences to the individual without making them explicit. In today's rapidly changing environment it is critical that the family, school, and other social institutions assist young people to understand these changes and make adequate preparations. Unfortunately, it is difficult for anyone to accurately predict what will happen in the next several decades; nevertheless it is important to at least make some attempt to do so. For example, the vast majority of career opportunities in the 1990s did not exist in the 1960s (Bridges, 1997). Some people were prepared to take advantage of these opportunities, but many were not. The speed of these changes is likely to accelerate and must be considered when defining important developmental assets.

Creating An Effective Developmental Ecology

It has become obvious to many that important social institutions such as families, communities, religious organizations, and schools are in need of attention (e.g., Friedman, 1999; Siegel, 2000; Thomas, 1996). While the family continues to play an influential role, the wide variety of home environments contributes to the lack of important external assets for children and youth (Evans, 2004; Gottman, 1994). The divorce rate is increasing throughout the industrialized world, with the United States having the highest divorce rate in the world (Gottman, Murray, Swanson, Tyson & Swanson, 2002). It is estimated that 50% to 67% of first marriages will end in divorce within a forty year span (Martin & Bumpass, 1989); the rate for

dissolution of second marriages is approximately 10% higher (Cherlin, 1981). Holmes and Rahe (1967) found that the disruption of a marriage is one of the most significant stresses on an individual's mental and physical health. Gottman et al. concurred, stating that, "Marital distress, conflict, and disruption are associated with a wide range of deleterious effects on children, including depression, withdrawal, poor social competence, health problems, poor academic performance, and a variety of conduct related difficulties" (p. 6).

Communities and religious organizations have undergone similar disruptions (Duany, Plater-Zyberk & Speck, 2000; Wright, 2002). While the neighborhood and community have always been important influences on the development of children and youth (Dean & Huitt, 1999), a recent assessment found that only 40% of the over 200,000 6th-to-12th grade students surveyed reported they believed they lived in a caring neighborhood (Search Institute, 2002).

In the shift from an agricultural- to an industrial- and then to an information-based economy, classrooms and schools have been central to the education of children and youth for successful adulthood. As the needs of the society changed in the early part of the twentieth century, this important social institution was able to satisfactorily adjust in terms of its preparation of children and youth for adult citizenship. At the turn of the century, America faced issues of a need to train larger numbers of workers for the rapidly expanding industrial sector and the socialization of an influx of immigrants. Two world wars applied pressure to become increasingly effective and efficient with a concomitant requirement that people needed a minimum of a high school education. More than 75% of American youth graduated from high school in the 1980s, up from less than 10% at the turn of the century (Greene, 2002). However, graduation rates as well as measures of student achievement have remained essentially stable for

over 25 years. During this same time period, students in other nations have begun to surpass U.S. students in a number of areas (National Center Education Statistics, 2001; Schmidt et al., 2001).

The publication of *A Nation at Risk* (National Commission on Excellence in Education, 1983) made it abundantly clear that despite the increased funding for research and subsequent enlargement of the knowledge base of effective classrooms and schools, there were still major concerns with the functioning of the nation's public school system. In the 1980s several researchers developed models of the teaching/learning process that integrated much of what was known about factors related to school achievement (e.g., Cruickshank 1985; Proctor 1984; Squires, Huitt, & Segars, 1983). At the same time other researchers developed models of effective classroom practice (e.g., Hunter, 1994; Rosenshine, 1995; Slavin, 2003). A major problem that envelops all these models is that they focus heavily on improving test scores. As important as that outcome is, the public is concerned also about students' character, self-esteem, and social development (Gallup, 1975, 1980). In this regard, the public seems more on target than researchers since student achievement, level of education, and academic intelligence account for no more than one-third of the variance related to adult success (Gardner, 1995; Goleman, 1995).

Recent attempts to hold schools, and especially teachers, totally responsible for student achievement present a problem in that there are multiple factors beyond the control of building-level educators that contribute to educational achievement (Huitt, 1999b). While it is true that teachers (Rosenhine, 1995) and principals (Reavis, Vinson & Fox, 1999) play an important part in facilitating school learning, other factors such as the structure and functioning of the family (Evans, 2004; Zill, 1992), the interaction with religious organizations (Greeley, 1997), school size (Howley, 1997), and access to aspects of social capital (Dika & Singh, 2002; Grissmer,

Flanagan, Kawata & Williamson, 2000) have also been shown to be important, sometimes more so.

There are, therefore, major difficulties with the approach America is taking in preparing its children and youth for adult success in the 21st century. First, a single focus on academic achievement is inadequate. Rather, there is a need to consider a model of adult success that includes not only financial and career success, but also actualizing one's full potential, happiness, living a meaningful life, having a successful marriage, successfully raising children, maintaining a support group of friends, and contributing to solving major social and cultural issues of our time.

Second, classroom practice accounts for only a small portion of the variance of scores on standardized tests of basic skills when other factors such as student ability, home environment, and school size are considered. Researchers have demonstrated that student achievement increases when the influences of multiple social institutions are coordinated (Epstein, Coates, Salinas, Sanders, M. & Simon, 1997; Sanders, 1998). There are not only multiple factors related to adult success, but also multiple influences on each of these factors. This multidimensional perspective needs to be central to the construction of a model of the development of children and youth.

There is a need to strengthen each one of the social institutions and to work to integrate their influence. Families need to be supported by and support the other social institutions. Schools, religious organizations, and community institutions need to do the same. Each needs to hold itself accountable individually, and they all need to hold themselves accountable collectively, for the development of our nation's children and youth.

Summary

A fresh vision and a more valid paradigm are necessary to guide thinking about how to prepare children and youth for success as adults. Science has made steady progress in developing ecological, organismic, and systems approaches to understanding human beings and their social behavior over the last half of the twentieth century (Ford, 1987; Miller, 1978; Jordan, 1979). These are rapidly replacing the more reductionistic approaches that attempt to isolate selected factors. Syntheses of research have pointed to a variety of outcomes in addition to academic competence and have shown that more extensive communication and involvement among schools, families, and community organizations leads to higher student achievement (Niemic, Sikorski & Walberg, 1999).

There is a continuing need to develop a vocabulary and holistic approach to guiding the development of children and youth that can overcome a resistance of individuals and organizations to make necessary changes (Kegan & Lahey, 2002). Continuing to use the same paradigm and vocabulary that was successful in the twentieth century while in the midst of the present exponential rate of change is like driving down an Interstate highway at 50 miles per hour, looking in the rearview mirror. It is necessary to look forward to the demands our young people will face as adults, to imagine a world we have never experienced, to recognize the influence of possible futures on current behavior and to consider this within a more valid, holistic paradigm.

While this paper has presented an overview of a holistic approach to the development of children and youth, there is still a need to consider each domain in more detail. Each domain should review literature as to current understandings related to the its definition and a consideration of why it is important, major developmental issues that should be considered, a

brief sampling of the kinds of activities that teachers (and to some extent parents) can use to assist individual development within that domain. Fundamental issues of assessment, measurement, and evaluation, especially process evaluation, need to be addressed and specific measures for each domain need to be identified or developed. Hummel and Huitt (1994) discuss the importance of this issue with the term WYMIWYG (What You Measure Is What You Get). Using this concept, the authors suggest there is a tendency to focus energy and effort only on what is attended to through data collection and evaluation.

An equally important principle is how to identify and report change as it occurs simultaneously in multiple domains. Change occurs in a spiral fashion; at any given time an individual is making changes in all the domains, with change occurring at different rates for different individuals and different time frames. For example, in early childhood dramatic changes in cognitive development accompany dramatic changes in language development. In later adolescence, another rapid change in cognitive development is accompanied by a search for meaning or spiritual development. This is not to say there is no spiritual development occurring in early childhood or no language development in adolescence. It merely points to the need to continually revisit each of the domains in a coordinated fashion throughout the lifespan of the individual and to report both the dynamics of development as well as current status. This is similar to the difference between a movie and a still picture. Both offer different perspectives on a given phenomena, each with its own richness and detail. There is a tendency in today's society to focus on a snapshot of development in one small part of one domain. Is it any surprise that this is an inadequate picture of a young person's preparation for the 21st century? We can do better; we must do better. Our children's lives depend on it.

References

- American Federation of Teachers. (1999). *Making standards matter 1999: An update on state activity. Educational Issue Policy Brief, 11*. Retrieved March 2003, from <http://www.aft.org/edissues/policybriefs/download/Policy11.pdf>.
- Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company.
- Bauman, K. J. (2002, May 16). Home schooling in the United States: Trends and Characteristics. *Education Policy Analysis Archives, 10*(26). Retrieved: July 2004, from <http://epaa.asu.edu/epaa/v10n26.html>.
- Bennett, W. (1993, April 7). Is our culture in decline? *Education Week, 12*(28). 32.
- Benson, P. L., Galbraith, J., & Espeland, P. (1994). *What kids need to succeed: Proven, practical ways to raise good kids*. Minneapolis: Free Spirit Publishing, Inc.
- Bridge, R., Judd, C., & Moock, P. (1979). *The determinants of educational outcomes: The impact of families, peers, teachers, and schools*. Cambridge, MA: Ballinger Publishing Co.
- Bridges, W. (1997). *Creating you & company: Learn to think like the CEO of your own career*. Cambridge, MA: Perseus Books.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.

- Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.). *Annals of child development*, 6 (pp. 187-251). Greenwich, CT: JAI.
- Bureau of the Census. (1990). *Education in the United States*. Washington, DC: U. S. Department of Commerce. Retrieved May 2003, from <http://www.census.gov/prod/cen1990/cp3/cp-3-4.pdf>.
- Capra, F. (1996). *The web of life: A new understanding of living systems*. New York: Doubleday.
- Cherlin, A. (1981). *Marriage, divorce, remarriage*. Cambridge, MA: Harvard University Press.
- Chickering, A., & Reisser, L. (1993). *Education and identity*. (2nd ed.) San Francisco: Jossey-Bass.
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.
- Copan, P. (2001). *That's just your interpretation: Responding to skeptics who challenge your faith*. Holland, MI: Baker Book House.
- Cruikshank, D. (1985, Winter). Profile of an effective teacher. *Educational Horizons*, 90-92.
- Damon, W. (Ed.). (2002). *Bringing in a new era in character education*. Stanford, CA: Hoover Institute Press.
- Danesh, H.B. (2001). *The psychology of spirituality* (Rev. ed.). Victoria, Canada: Paradigm Publishing, Ottawa, Canada: Nine Pines Publishing.
- Dean, M., & Huitt, W. (1999). *Neighborhood and community*. Valdosta, GA: Valdosta State University. Retrieved May 2003, from Educational Psychology Interactive, <http://chiron.valdosta.edu/whuitt/col/context/neighbor.html>.
- Dika, S., & Singh, K. (2002). Applications of social capital in educational literature: A critical synthesis. *Review of Educational Research*, 72(1), 31-60.

- Duany, A., Plater-Zyberk, E., & Speck, J. (2000). *Suburban nation: The rise of sprawl and the decline of the American dream*. New York: North Point Press.
- Epstein, J., Coates, L., Salinas, K., Sanders, M., & Simon, B. (1997). *School, family, community partnerships: Your handbook for action*. Thousand Oaks, CA: Corwin.
- Etzioni, A. (1984). *Self-discipline, schools, and the business community*. Washington, DC: National Chamber Foundation.
- Evans, R. (2004). *Family matters: How schools can cope with the crisis in childrearing*. San Francisco: Jossey-Bass.
- Ford, D. (1987). *Humans as self-constructing living systems: A developmental perspective on behavior and personality*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Friedman, T. (1999). *The lexis and the olive tree: Understanding globalization*. New York: Farrar, Straus and Giroux.
- Gallup, G. (1975, December). The seventh annual Gallup Poll of public attitudes toward public schools. *Phi Delta Kappan*, 57, 227-41.
- Gallup, G. (1980, September). The twelfth annual Gallup Poll of public attitudes toward public schools. *Phi Delta Kappan*, 62, 39.
- Gallup, G. H. (1993). *Religion in America*. Princeton, NJ: Princeton Religious Research Center.
- Gallup International. (1999). Religion in the world at the end of the millennium. *Gallup International Millennium Survey*. London: Author. Retrieved July 2002, from <http://www.gallup-international.com/survey15.htm>.
- Gardner, H. (1995). Cracking open the IQ box. In S. Fraser (Ed.), *The bell curve wars* (23-35). New York: Basic Books.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.

- Gottman, J. (1994). *Why marriages succeed or fail*. New York: Simon & Schuster.
- Gottman, J., Murray, J., Swanson, C., Tyson, R., & Swanson, K. (2002). *The mathematics of marriage: Dynamic nonlinear models*. Cambridge, MA: MIT Press.
- Gould, J. (2002). *The structure of evolutionary theory*. Cambridge, MA: Harvard University Press.
- Greeley, A. (1997). Coleman revisited: Religious structures as a source of social capital. *American Behavioral Scientist*, 40(5), 587-594.
- Greene, J. (2002). *High school graduation rates in the United States* (Rev.). Washington, DC: Black Alliance for Educational Options. Retrieved December 2002, from http://www.manhattan-institute.org/html/cr_baeo.htm#03.
- Grissmer, D., Flanagan, A., Kawata, J., & Williamson, S. (2000). *Improving student achievement: What state NAEP test scores tell us*. Santa Monica, CA: Rand Corporation. Retrieved March 2004, from <http://www.rand.org/publications/MR/MR924/>.
- Haynes, R., & Chalker, D. (1997, May). World-class schools: What does it mean to be "world class"? And how close are U.S. schools to getting there? *American School Board Journal*. Retrieved March 2003, from <http://www.asbj.com/achievement/aa/aa1.html>.
- Heath, D. (1980). Wanted: A comprehensive model of healthy development. *The Personnel and Guidance Journal*, 58(5), 391-399.
- Heath, D. (1991). *Fulfilling lives: Paths to maturity and success*. San Francisco: Jossey-Bass.
- Heath, D. (1994). *Lives of hope: Women's and men's paths to success and fulfillment*. Haverford, PA: Conrow Publishing House.
- Hilgard, E. R. (1980). The trilogy of mind: Cognition, affect, and conation. *Journal of the History of the Behavioral Sciences*, 16, 107-117.

- Holmes, T., & Rahe, R. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research, 11*, 213-218.
- Howley, C. (1997). Dumbing down by sizing up: Why smaller schools make more sense—if you want to affect student outcomes. *The School Administrator, 54*(9), 24-26, 28, 30.
- Huitt, W. (1995). *Success in the information age: A paradigm shift*. Background paper developed for workshop presentation at the Georgia Independent School Association, Atlanta, Georgia. Retrieved March 2003, from <http://chiron.valdosta.edu/whuitt/col/context/infoage.html>.
- Huitt, W. (1998). Becoming a Brilliant Star: Knowledge from the major world religions. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved July 2004, from <http://chiron.valdosta.edu/whuitt/brilstar/religion/overview.html>.
- Huitt, W. (1999a). Becoming a Brilliant Star: Philosophy of education. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved July 2004, from <http://chiron.valdosta.edu/whuitt/brilstar/brilsphl.html>.
- Huitt, W. (1999b). *Implementing effective school achievement reform: Four principles*. Paper presented at the School Counseling Summit, Valdosta State University, Valdosta, GA, April 20. Retrieved May 2003, from http://chiron.valdosta.edu/whuitt/files/school_reform.html.
- Huitt, W. (2004). Becoming a Brilliant Star: Historical exemplars. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved July 2004, from <http://chiron.valdosta.edu/whuitt/brilstar/brilsexm.html>.
- Huitt, W., & Vessels, G. (2002). Character education. In J. Guthrie (Ed.), *The encyclopedia of education* (2nd ed.), New York: Macmillan.

- Hummel, J., & Huitt, W. (1994, February). What you measure is what you get. *GaASCD Newsletter: The Reporter*, 10-11. Retrieved May 2003, from <http://chiron.valdosta.edu/whuitt/files/wymiwyg.html>.
- Hunter, M. (1994). *Enhancing teaching*. Upper Saddle River, NJ: Pearson Education.
- Jordan, D. (1979). Rx for Piaget's complaint. *Journal of Teacher Education*, 30(5), 11-14. Retrieved July 2005, from http://teach.valdosta.edu/anisa/overview/Rx_for_Piaget.html.
- Jordan, D., & Streets, D. (1973). The Anisa model: A new basis for educational planning. *Young Children*, XXVIII(5), 289-307. Retrieved July 2005, from http://teach.valdosta.edu/anisa/overview/jordan_streets_anisa.pdf.
- Kagan, J. (2000). *Three seductive ideas*. Cambridge, MA: Harvard University Press.
- Kegan, R., & Lahey, L. (2002). *How the way we talk can change the way we work: Seven languages for transformation*. New York: Wiley.
- Koestler, A. (1967) *The ghost in the machine*. London: Arkana.
- Larson, E., & Witham, L. (1998). Leading scientists still reject God. *Nature*, 394, 313.
- Lazslo, E. (1996). *The systems view of the world: A holistic vision for our time*. Hampton Press.
- Liebes, S., Sahtouris, E., & Swimme, B. (1998). *A walk through time: From stardust to us: The evolution of life on earth*. New York: John Wiley & Sons.
- Martin, T., & Bumpass, L. (1989). Recent trends in marital disruption. *Demography*, 26, 37-51.
- Mayer, J. D. (1995). A framework for the classification of personality components. *Journal of Personality*, 63, 819-877.
- McCarthy, K. (1992). *The on-purpose person*. Colorado Springs, CO: Navpress.
- Merrifield, J. (2000). The school-choice choices. *The Independent Review*, V(2), 189-207. Retrieved: July 2004, from <http://www.independent.org/tii/media/pdf/tir52merrifield.pdf>.

- Miller, J. (1978). *Living systems*. New York: McGraw-Hill.
- Mustakova-Possardt, E. (2004). Education for critical moral consciousness. *Journal of Moral Education*, 33(3), Retrieved July 2005, from http://chiron.valdosta.edu/whuitt/files/JME_criticalcons.pdf.
- Nash, R. (1997). *Answering the "virtuecrats": A moral conversation on character education*. New York: Teachers College Press.
- National Center Education Statistics. (2001). *Digest of education statistics. Chapter 6. International comparisons of education*. Washington, DC: Author. Retrieved May 2003, from <http://nces.ed.gov//pubs2002/digest2001/ch6.asp>.
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. Washington, DC: U. S. Department of Education. Retrieved May 2003, from <http://www.ed.gov/pubs/NatAtRisk/>.
- Neisser, E. (1967). *Cognitive psychology*. New York: Appleton-Century-Crofts.
- Niemiec, R., Sikorski, M., & Walberg, H. (1999). Designing school volunteer programs. *NASSP Bulletin*, 83, 114-116.
- Pinker, S. (2002). *The blank slate: The modern denial of human nature*. New York: Viking.
- Proctor, C. (1984, March). Teacher expectations: A model for school improvement. *The Elementary School Journal*, 469-481.
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.
- Raman, S. P. (1975). Role of nutrition in the actualization of the potentialities of the child: An Anisa perspective. *Young Children*, XXXI(1), 24-32. Retrieved April 2005, from http://teach.valdosta.edu/anisa/development/raman_nutrition3.pdf.

- Reavis, C., Vinson, D., & Fox, R. (1999). Importing a culture of success via a strong principal. *Clearing House*, 72(4), 199-202.
- Rose, L., & Gallup, A. (2000). *The 32nd annual Phi Delta Kappa/Gallup poll of the public's attitudes toward the public schools*. Bloomington, IN: Phi Delta Kappa. Retrieved May 2003, from <http://www.pdkintl.org/kappan/kpol0009.htm>.
- Rosenshine, B. (1995). Advances in research on instruction. *The Journal of Educational Research*, 88(5), 262-268.
- Sahtouris, E., & Lovelock, J. (2000). *Earthdance: Living systems in evolution*. Lincoln, NE: iUniverse.
- Sanders, M. (1998) The effects of school, family, and community support on the academic achievement of African American adolescents. *Urban Education* 33, 385-410.
- Scales, P. C., & Leffert, N. (1999). *Developmental assets: A synthesis of the scientific research on adolescent development*. Minneapolis: Search Institute.
- Schmidt, W., McKnight, C., Houang, R., Wang, H., Wiley, D., Cogan, L., & Wolfe, R. (2001). *Why schools matter: A cross-national comparison of curriculum and learning*. San Francisco: Jossey-Bass.
- Scholl, S. (2002). *The peace Bible: Words from the great traditions*. Ashland, OR: White Cloud Press.
- Search Institute. (2002). *Young people's developmental assets, by involvement in religious community*. Minneapolis, MN: Author. Retrieved May 2003, from <http://www.search-institute.org/congregations/assetsxinvolvement.pdf>.
- Segars, M., & Jelen, T. (1995). *Wall of separation? Debating the public role of religion*. Lanham, MD: Rowman & Littlefield.

- Seligman, M. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: Simon & Schuster.
- Siegel, L. (2000). *Criminology* (7th ed.). Belmont, CA: Wadsworth Thomson Learning.
- Slavin, R. (2003). *Educational psychology: Theory and practice* (7th ed.). Boston: Allyn & Bacon.
- Squires, D., Huitt, W., & Segars, J. (1983). *Effective schools and classrooms: A research-based perspective*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Sternberg, R. (1988). *The triarchic mind: A new theory of human intelligence*. New York: Penguin Books.
- Sternberg, R., Wagner, T., Williams, W., & Horvath, J. (1995). Testing common sense. *American Psychologist*, 50(11), 912-927.
- Templeton, J., and Giniger, K. (Eds.). (1998). *Spiritual evolution: Scientists discuss their beliefs*. Radnor, PA: Templeton Foundation Press.
- Thomas, R. W. (1996). *Understanding interracial unity*. Thousand Oaks, London, New Delhi: Sage Publications.
- Vandervert, L. (1993). Neurological positivism's evolution of mathematics. *The Journal of Mind and Behavior*, 14, 277-288.
- Waitley, D. (1986). *Seeds of greatness: The ten best-kept secrets of success* (Reissue ed.). New York: Pocket Books.
- Whitehead, A. N. (1929). *Process and reality: An essay in cosmology*. New York: Macmillan.
- Wilson, A. (Ed.). (1991). *World scripture: A comparative anthology of sacred texts*. New York: Paragon House.
- Wilson, E. (1978). *On human nature*. Cambridge: Harvard University Press.

Wright, D. (2002). *It takes a neighborhood: Strategies to prevent urban decline*. Ithaca, NY: Rockefeller Institute Press.

Ziglar, Z. (1992). *The wheel of life*. Charlotte, NC: Internet Services Corp.

Zill, N. (1992). *Trends in family life and children's school performance*. Washington, DC: Child Trends, Inc. (ERIC Reproduction No. ED378257).