

The Construct of Asynchronous Development

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The construct of giftedness as asynchrony has a strong theoretical foundation in the works of Hollingworth, Terrassier, Dabrowski, and Vygotsky. It is a child-centered perspective that can guide parenting, teaching, and counseling of gifted children. Asynchrony comprises uneven development, complexity, intensity, heightened awareness, risk of social alienation, and vulnerability. It is not a source of envy any more than its mirror image, retardation. When giftedness is equated with potential for success in adult life, it engenders backlash from those who believe that they are denied equal opportunity in the competition for fame and fortune. Asynchrony is not a competitive concept: More asynchrony is not better. Giftedness as asynchrony offers both an understanding of the inner experience of gifted individuals throughout the life span and a sound framework for responding to the developmental differences of this group.

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To be gifted is to be vulnerable. To have the mental maturity of a 14-year-old and the physical maturity of an 8-year-old poses a unique set of challenges analogous to those that face the child with a 14-year-old body and an 8-year-old mind. Parenting a child with large developmental discrepancies in either direction is equally challenging; even moderate discrepancies can be daunting. Only one of these conditions receives societal recognition, sympathy, and public support: Gifted children and their parents must deal with their concerns alone; few appreciate the magnitude of the task.

A young child who has heightened emotions coupled with advanced cognitive awareness of the suffering and perils in the world feels helpless and afraid. And what if this child eats alone every day in the school cafeteria or is not invited to the other children's birthday parties because she is too "different" from her classmates? Such experiences dramatically affect the development of self-efficacy. Would these issues be resolved by developing her talents or reminding her of her potential for leadership in adult life?

The traditional constructs of giftedness and talent focus on the potential for recognized achievement in adult life or on the methods of identifying and developing specific talents in children. Grant and Piechowski (in press) wrote:

For many theorists and researchers, explaining giftedness means describing the conditions that produce gifted achievements. Trapped by the metaphor of "gifts," they believe that the most important aspect of being gifted is the ability to turn "gifts" into recognizable and valued accomplishments. Most of the theories and models of giftedness that Cohen and Ambrose (1993) have examined are about maximizing giftedness. These models and theories regard gifted children much as farmers regard cows and pigs, with an eye to getting them to produce more. They do not describe how giftedness works—how the gifted think, feel, and experience. (p. 8)

Although zealous school reformers proclaim that education for the gifted is nothing more than special privileges securing advantages to an already "advantaged" group in the competition for grades, social status, glory or material gain (George, 1992; Margolin, 1993, 1994; Sapon-Shevin, 1994), gifted individuals often experience their "gifts" as distinct disadvantages that make life more difficult. When giftedness is defined as high performance in school or the potential for recognized achievement in adult life, the vocal opponents look like they might have a valid argument. Achievement is very much a function of opportunity (Hollingworth, 1926), because greater opportunities for success are available to those who have greater

financial resources. Acclaim for individual attainment is culturally determined to a much greater degree than measured intelligence and aptitude (Silverman, 1996) which, for decades, have facilitated upward mobility for economically disadvantaged groups (Bereiter, 1976–1977). By way of contrast, the construct of giftedness as asynchrony described in this article is not related to potential for success any more than its mirror image—retardation—is related to potential for success. It is a different set of experiences throughout the life span related to atypical development, and it occurs in all cultures (Silverman, 1995), all ethnic groups, and all segments of society (Dickinson, 1970). Asynchrony is certainly not a source of envy, and it is unlikely to generate the kind of vitriolic public debate that exists with our current views of giftedness as high potential for success in adult life.

Developmentally advanced children, like the developmentally delayed, are at risk in a society that prizes sameness. The albino bird is often destroyed by the normally-colored members of the flock. The value of the gifted to society often depends on the shifting winds and priorities of their culture. In America, over the last 40 years, gifted children have been victims of a political Ping-Pong match—alternately mined as a national resource, then attacked or ignored in the name of egalitarianism. This national ambivalence is echoed in gifted children's experiences with school: They may be taunted by their peers when they work too hard and at the same time chastised by their teachers for not working up to their potential. Catch 22! If they cannot sit still while the teacher reviews information they learned 2 years ago, or if they set much higher standards for the quality of their work than do their classmates, or if they feel things too deeply, they are likely to be medicated (Silverman, *in press*). Throughout the ages, in all cultures, the gifted have been laughed at when they see things differently, valued more for their accomplishments than for who they are, and silenced—sometimes permanently—when they see too much. It is not easy being gifted. Achievements and talents tell only a small part of the story. They are just the tip of the iceberg. To really understand the phenomenon, one must plumb the depths of the gifted experience.

A New Perspective of Giftedness

A new definition has been proposed that stresses the vulnerability of gifted individuals, focuses on their difficulties fitting into society, provides insight into their phenomenological realities, and emphasizes the important role of parents, teachers, and counselors in their optimal development. The group of practitioners, parents, and theorists who gathered to construct this new vision were deeply concerned with the increasing emphasis on prod-

ucts, performance, and achievement in American thinking about giftedness and the substitution of *talented* for *gifted*. This trend can be seen clearly in *National Excellence: A Case for Developing America's Talent* (Office of Educational Research and Improvement, 1993). It has gradually become politically incorrect to think of giftedness as inherent within the child and safer to talk about its external manifestations. Throughout the last 10 years, experts have been recommending that *gifted children* be replaced with *gifted behaviors*, *gifted program children*, and, more recently, *talents in different domains*. Something vital is missed in these popular formulations: the child. The new perspective builds on the child-centered insights of Hollingworth (1931, 1939), Vygotsky (1962), Dabrowski (1972), and Terrassier (1985). The following definition was put forth by the Columbus Group (1991):

Giftedness is *asynchronous development* in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. This asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching and counseling in order for them to develop optimally.

Asynchronous literally means out-of-sync. The gifted are out-of-sync both internally and externally (Terrassier, 1985). Gifted children in any cultural milieu have greater discrepancies among various facets of their development than do average children (Silverman, 1995). The unevenness of the development of the gifted has been documented by many researchers (e.g., Gowan, 1974; Hollingworth, 1942; Manaster & Powell, 1983; Roedell, 1989). The clearest example of this unevenness is the rate at which mental development outstrips physical development. In the Seattle Project, discrepancies were found between intellectual development and the development of physical and social skills. "The evidence seems to indicate that intellectually gifted children's performance in the physical domain may only be advanced to the extent that the physical tasks involve cognitive organization" (Roedell, 1989, p. 21).

Binet (Binet & Simon, 1908) constructed the *mental age* as a means of capturing the degree to which a child's mental abilities differ from those of other children of his or her chronological age. The concept of mental age has been enormously helpful in the understanding of retardation. A child's mental age predicts the amount of knowledge he or she has mastered, the rate at which the child learns, sophistication of play, age of true peers, maturity of the child's sense of humor, ethical judgment, and awareness of the world. In contrast, chronological age predicts the child's height, physical

coordination, handwriting speed, emotional needs, and social skills (Silverman, 1995). Uneven development is mirrored in external adjustment difficulties because the gifted child often feels different from, or out of place with, others. External asynchrony, then, is the lack of fit of the gifted child with other same-age children and with the age-related expectations of the culture (Terrassier, 1985). The greater the degree to which cognitive development outstrips physical development, the more out-of-sync the child feels internally, in social relationships, and in relation to the school curriculum. Age is not an appropriate ruler for a gifted child's social or academic needs; degree of asynchrony must also be taken into account.

The *intelligence quotient*, originally named the *mental quotient* by Stern (1910), is simply the ratio of mental age to chronological age multiplied by 100. Like Stern, Binet never claimed that the IQ test could measure the totality of intelligence. He viewed intelligence as a rich, complex, multifaceted gestalt—a myriad of dynamically interrelated abilities. Emotion and personality also played critical roles in his conception of intellectual ability. He believed that intelligence is highly influenced by the environment and that it can be improved through appropriate instruction. From Binet's developmental perspective, intelligence is a continuously evolving process, not a static amount of raw material that stays the same throughout life. Yet, intelligence testing is viewed today as a method of rigidly determining the limits of one's abilities—quite different from Binet's intent. Consistent with Binet's philosophy, the IQ should be seen as a *minimal estimate of asynchrony*—the extent to which cognitive development (mental age) diverges from physical development (chronological age).

Miraca Gross (1993) provided a graphic illustration of how the ratio between mental age and chronological age indicates varying degrees of asynchronous development that increase with age. At the age of 6, a moderately gifted child with an IQ of 135 has a 6-year-old body and an 8-year-old mind; at 9, the same child has a 9-year-old body and a 12-year-old mind, and at age 12, the child will be mentally 16. By comparison, an extraordinarily gifted 6-year-old, with an IQ of 170, has a 10-year-old mind, at 9 the child has a 15-year-old mind, and at 12, the child will have a 20-year-old mind. So asynchrony cannot be thought of as static; it is dynamic, constantly changing.

The situation becomes even more complicated when it is understood that psychologically the child is an amalgam of many developmental ages (Tolan, 1989) and may appear to be different ages in different situations:

In terms of development chronological age may be the least relevant piece of information to consider. Kate, with an IQ score of 170, may be six, but she has a "mental age" of ten and a half. ... Unfortunately, Kate

is an amalgam of many developmental ages. She may be six while riding a bike, thirteen while playing the piano or chess, nine while debating rules, eight while choosing hobbies and books, five (or three) when asked to sit still. How can such a child be expected to fit into a classroom designed around norms for six year olds? (p. 7)

Asynchronous development is a very helpful construct to parents. An excerpt from a letter from Estes to Kearney (1992) before the Columbus Group definition appeared illustrates this:

At 14 [Max] can display a ferocious insistence for justice with the passions and tenacity of a 3-year-old ... this gets confusing! We were told that at age 9 he displayed "cognitive reasoning skills way beyond his years." I wish he came with a blinking sign on his forehead to let me know just who I am dealing with: the 3-year-old, the 14-year-old, or the 25-year-old.

Last summer an ill-placed golf ball landed in the bedroom of a house adjoining a picturesque lighthouse. (Remind me to ask how this boy could ignore the physics of playing golf in a densely populated suburban neighborhood.) ... I heard myself asking Max, again and again, "What were you thinking?"

That's the thing—they think when you least expect them to, and go blank at the most inopportune times. My guess is that it's the tension of being caught between all those ages I just mentioned. But I don't think my theory would be supported in a textbook, even though I live by it every day in order to give some organized definition to what's going on. (pp. 1, 8).

There is still another form of asynchrony that needs to be mentioned: the condition of dual exceptionality. The most asynchronous child is one who is both highly gifted and learning disabled. A remarkable number of gifted children have either recognized or undetected learning disabilities, such as auditory processing weaknesses, writing disabilities, visual perception difficulties, spatial disorientation, dyslexia, and attentional deficits (Silverman, 1995). Marked discrepancies between strengths and weaknesses continue into adult life.

But uneven development is only part of the picture. Giftedness is not mere precocity—getting there sooner. Asynchrony implies greater complexity. Complexity affects all aspects of one's life. Dabrowski and Piechowski (1977) observed five realms of heightened intensity and complexity: psychomotor, sensual, imaginal, intellectual, and emotional. Neural activity substantially beyond the norm in any of these five dimensions is called

“overexcitability,” and represents an abundance of physical, aesthetic, creative, intellectual or emotional energy. According to Dabrowski (1972):

Each form of overexcitability points to a higher than average sensitivity of its receptors. As a result, a person endowed with different forms of overexcitability sees reality in a different, stronger, and more multisided manner. Reality for such an individual ceases to be indifferent but affects him deeply and leaves long-lasting impressions. Enhanced excitability is thus a means for more frequent interaction and a wider range of experiencing. (p. 7)

Correlations of these “overexcitabilities” with giftedness have been established in several studies (e.g., Ackerman, 1993; Breard, 1994; Domroese, 1993; Gallagher, 1985; Miller, Silverman, & Falk, 1994; Schiever, 1985). Therefore, the gifted not only think differently from their peers, they also feel differently. Cognitive complexity and emotional intensity lead to awareness for which the child may not be emotionally ready. Although other children their age are blissfully unaware of the gross inequities in the world, gifted children may be profoundly affected by the plight of the homeless or the starving children in Bosnia. “Gifted children see the complexities of the world but feel powerless to contend with their advanced awareness” (Roeper, 1995, p. 147). Gowan (1974) likened precocious cognitive awareness to premature rupturing of the protective placental shell during the prenatal period. Too early exposure to environmental realities can be as precarious in postuterine as in prenatal development. These children need child-centered parents, teachers, and counselors who are willing to listen to them and understand them, who appreciate their fragility, and who are not trying to mold them so that they fit better into society or produce more.

Precursors to the Construct of Asynchrony

Hollingworth

Hollingworth (1886/1939) may have been the first to navigate the interior of giftedness—the vast unexplored territory of the psyche. She mapped the critical developmental issues with which atypical children have to contend. She listened. She listened compassionately to the children and to their parents. She listened intently—as a marine biologist might listen to whale songs in hopes of decoding their hidden meanings—until the deepest layers of their experience were revealed to her. They shared with her their

loneliness, their need for precision and fairness, their impatience with superficiality and foolishness, their desire to find like minds, their love of beauty, their early grappling with good and evil, their fledgling attempts to build a philosophy of life, their search for their place in the universe and their delightful sense of humor—which she called their “saving sense” (Hollingworth, 1940a, p. 274). The richness and enduring quality of her insights attest to the depth of her compassion and perceptiveness. She remains unparalleled as the “greatest counselor to the gifted and talented” (Kerr, 1990, p. 178).

Hollingworth (1931) clearly recognized the challenges inherent in asynchronous development:

To have the intelligence of an adult and the emotions of a child combined in a childish body is to encounter certain difficulties. It follows that (after babyhood) the younger the child, the greater the difficulties, and that adjustment becomes easier with every additional year of age. The years between four and nine are probably the most likely to be beset with the problems mentioned. (p. 13)

The internal and external aspects of asynchrony were highlighted in Hollingworth’s work. In 1931, she wrote that problems of right and wrong and evil in the abstract become troublesome for highly gifted children because their awareness is so far advanced of their emotional control and physical powers. They have the awareness but not the emotional maturity to deal with that awareness. She frequently articulated how difficult it is for gifted children to fit in with age peers. “The more intelligent a person is, regardless of age, the less often can he find a truly congenial companion” (Hollingworth, 1942, p. 253). Many of the highly gifted children she studied developed habits of solitary play, not because they were unfriendly and ungregarious by nature but because their efforts to relate to others were quickly defeated. Other children did not share their interests, vocabulary, or the same desire to organize their activities. The brighter the child, the greater the problem. The majority of children above 160 IQ played little with other children “because the difficulties of social contact are almost insurmountable” (Hollingworth, 1939, p. 588).

Terrassier

A construct closely related to asynchrony is Terrassier’s (1985) *dyssynchrony*, which refers to the psychological and social ramifications of the uneven development of gifted children.

Gifted children often suffer from a lack of synchronicity in the rates of development of their intellectual, affective and motor progress, which has its effect in a number of aspects of their lives, and its results in turn produce further psychological problems. (p. 265)

Dyssynchrony has two aspects: internal and social. *Internal dyssynchrony* refers to disparate rates of intellectual, psychomotor, language, and affective development. One of the most frequent imbalances Terrassier observed was in the rates at which gifted children master writing as opposed to reading.

Social dyssynchrony is more obvious than internal dyssynchrony. It can be defined as the discrepancy between the speed of the mental development of the gifted child and that of his or her classmates. Terrassier (1985) suggested that understimulated gifted children may be working 3 to 5 years below their potential. To emphasize this point, he devised a "school quotient" composed of the student's "school age" (determined by grade placement) divided by his or her mental age, which graphically depicts the extent to which these children are "retarded" in their academic development (p. 270). The situation is exacerbated by what Terrassier calls a "Negative Pygmalion Effect" (p. 273), in which a teacher who is ignorant of a student's real potential sets age-appropriate expectations for him or her, and then the student accommodates to those expectations—never revealing greater capacity. Then, of course, the teacher assumes the child is not advanced. Terrassier suggested that the Negative Pygmalion Effect applies to about two thirds of gifted children in public education.

Social dyssynchrony is also evident in the expectations imposed on the child by parents and other children, who "often expect the gifted child to behave according to his age" (Terrassier, 1985, p. 271). Underexpectations from parents and other children creates "social pressure for the gifted child to conform" and can "make it difficult for him to discover and accept his precocity" (p. 273). Underachievement frequently results. In addition, the child's intelligence may become a source of socially induced guilt as he or she attempts to accommodate to the social norm. Dyssynchrony is evident in gifted children's choice of older friends for indoor games and conversation, and children their own age and size for outdoor games.

Dabrowski

Although asynchrony and dyssynchrony share many similar concepts, the construct of asynchrony is broader, taking into account the marriage of complexity and intensity that gives birth to different awareness. This im-

portant connection is drawn primarily from the work of Dabrowski (1972). *Intensity* is most often thought of in relation to emotion, but as it is used here, it actually refers to the whole range of overexcitabilities that intensify experience. Space permits only a cursory glance at Dabrowski's overexcitabilities and levels of development. Dabrowski (1964) proposed five levels of human development ranging from rigid egocentrism at Level I, total acceptance of group norms at Level II, desire for a life imbued with higher values at Level III, deep commitment to one's values at Level IV, and attainment of inner peace, compassion for all of humanity, altruism, and a life devoted to service at Level V. The overexcitabilities are developmentally significant in that Dabrowski found that individuals with higher emotional and moral development (Levels III, IV, and V) had rich inner lives and heightened reactions to a variety of stimuli.

Psychobiographical case studies of individuals who have attained higher level development (as analyzed by either Dabrowski's or Maslow's theory) reveal that all were gifted individuals (Brennan, 1987; Brennan & Piechowski, 1991; Grant, 1990; Piechowski, 1978, 1990a, 1990b, 1992). However, intelligence is insufficient as a predictor of advanced development; there must be built into the personality an extraordinary capacity to respond emotionally and creatively. This is where overexcitabilities enter the picture. The potential for higher moral development appears to be present in the moral sensitivity shown in gifted children (Silverman, 1994). However, this sensitivity does not automatically translate into moral behavior or in commitment to higher level values in adult life (Miller, Silverman, & Falk, 1994). Roedell (1989) discovered that gifted preschool children "had more ideas about ways to solve social conflicts and ways for children to interact cooperatively," but that "guided social interaction experience was necessary to help these children translate their advanced intellectual understanding into concrete behavior" (p. 21). Moral potential needs to be cultivated for it to blossom into higher level development in adulthood.

Piechowski (1992) addressed the need to "find and nurture human potential for altruism, self-actualization, and high levels of moral development" (p. 181):

We need tools for identification and cultivation of such potentials. Dabrowski's theory of emotional development is such a tool; it is a theory of human transcendence toward a life inspired by universal ideals of human brotherhood, peace, service, and self-realization. The theory arose from his extensive clinical experience with gifted and talented children, adolescents, and adults. One of the basic characteristics of the gifted is their intensity and an expanded field of their subjective experience. The intensity, in particular, must be understood as a qualitatively

distinct characteristic. It is not a matter of degree, but of a different quality of experiencing: vivid, absorbing, penetrating, encompassing, complex, commanding—a way of being quiveringly alive. (p. 181)

Vygotsky

From the Russian developmental psychologist Vygotsky (1962) come insights about the development of cognition that have profound implications for educational practice. His concept of the *zone of proximal development* reshapes the way in which education interfaces with child development. If we understand that it is only at this juncture between what the child understands and what the child is ready to learn that real learning occurs, then education becomes the art of the optimal match (Roedell, 1989) between the child's abilities and the curriculum. Vygotsky studied different types of asynchrony in blind and deaf children; however, his ideas are very relevant for a deeper understanding of giftedness. The connection between Vygotsky's work and the Columbus Group perspective is best articulated in the neo-Vygotskian framework put forth by Morelock (1996).

He was particularly interested in how children, through the instruction of more competent others, come to master the physical and psychological "tools" and "signs" of their culture. He also wrote about the resultant changes in inner experience as this development occurred and the subsequent impact that those changes in inner awareness then had on continued development.

Vygotsky saw emotional and cognitive development as interrelated, with children's ability to respond emotionally to abstractions intimately linked with the gradual course of cognitive development spanning the childhood years. This is a developmental progression that takes place precociously and at an accelerated rate in gifted children (Morelock, in press) with important implications for the quality of inner experience. Following Vygotsky's line of thought, both the cognitive and emotional experiences of gifted children would be qualitatively different from that of their agemates whose minds have not yet been reshaped by the integration of cultural symbols into the flow of thought. Such a qualitative difference—and the emotional vulnerability associated with it (Morelock, in press)—has indeed been documented by accumulated research from the gifted child strand. The Vygotskian perspective thus supports Annemarie Roeper's (1995) contention and the Columbus Group's assertion that the *developmental differences comprising gifted development are both quantitative and qualitative*. (p. 11)

Social and Emotional Aspects of Vulnerability

Dyssynchrony implies vulnerability; asynchrony—the combination of cognitive complexity and heightened intensity—makes that vulnerability explicit. With increased intellectual advancement comes increased vulnerability. According to Roedell (1984),

there is general agreement that highly gifted children are more susceptible to some types of developmental difficulties than are moderately gifted or average children. Areas of vulnerability include uneven development, perfectionism, adult expectations, intense sensitivity, self-definition, alienation, inappropriate environments, and role conflicts. (p. 127)

Certainly a child who is very dissimilar from agemates would be vulnerable in the social arena. But part of the problem stems from our lack of clarity, even the lack of appropriate terminology, for describing the social, emotional, and inner self of the child. In this confusion of terms and concepts, we may inadvertently press for inappropriate goals. For example, we use *socialization*, *social adjustment*, *social maturity*, *social skills*, and *social development* interchangeably as if anything with the term *social* in it is referring to the same concept.

Socialization Versus Social Development

Socialization of the gifted has been a major concern since the earliest writings in the field. It was feared that brilliant children were doomed to live in social isolation and alienation. Alger (1867) wrote, "A passion for perfection will make its subject solitary as nothing else can. At every step he leaves a group behind. And, when, at last, he reaches the goal, alas! where are his early comrades?" (p. 144). According to Hirsch (1931), "The genius is constantly forced to solitude, for he early learns from experience that his kind can expect no reciprocation of their generous feelings" (p. 303).

Socialization continues to receive more attention than this group's self-concept, academic progress, or inner development. All provisions for gifted students—ability grouping, acceleration, pull-out programs, full-day programs, special schools, home schooling—are held suspect on the grounds that they will interfere with children's social adjustment. Ironically, the immense amount of research that has accumulated over the last 70 years indicates that gifted children tend to enjoy greater popularity, greater social competence, more mature social relations, earlier psychological maturity, and fewer indications of psychological problems than do their less gifted

peers (Hollingworth, 1931; Janos & Robinson, 1985; Monks & Ferguson, 1983; Olszewski-Kubilius, Kulieke, & Krasney, 1988; Purkey, 1966; Robinson & Noble, 1991; Silverman, 1993; Terman, 1925; Wright, 1990). In a comprehensive review of the literature, Robinson and Noble (1991) reported

Perusal of a large group of studies of preadolescent children revealed [that] ... as a group, gifted children were seen as more trustworthy, honest, socially competent, assured and comfortable with self, courteous, cooperative, stable, and humorous, while they were also seen as showing diminished tendencies to boast, to engage in delinquent activity, to aggress or withdraw, to be domineering, and so on. (p. 62)

Most of these studies were conducted with students who were enrolled in special classes or accelerated. Clearly, then, gifted children's socialization does not suffer when special provisions are made for their learning needs.

Social development of the gifted appears paradoxical. Research unequivocally indicates that gifted children have excellent social adjustment; however, clinical experience reveals that many of these well-adjusted young people suffer great loneliness and endure inner conflicts between their desire to fit in and their ideals (Silverman, 1993). Their vulnerability is not reflected in the research. The majority of studies address the question of how well gifted children relate to other students—how well they adapt to group norms. Gifted students, particularly girls, frequently have excellent social skills, which may be practiced at the expense of their inner lives (Silverman, 1993). Young people who are highly adapted may be beginning the process of personality transformation—striving to attain inner ideals consistent with the higher levels of Dabrowski's theory. Such students may adopt a happy-go-lucky facade with classmates while experiencing intense inner conflict and self-doubt. In the words of one young person (American Association for Gifted Children, 1978),

We are not "normal" and we know it; it can be fun sometimes but not funny always. We tend to be much more sensitive than other people. Multiple meanings, innuendos, and self-consciousness plague us. Intensive self-analysis, self-criticism, and the inability to recognize that we have limits make us despondent. In fact, most times our self-searching leaves us more discombobbled than we were at the outset. (p. 9)

Let us examine the terms *socialization* and *social development* more closely. Socialization is defined as adapting to the common needs of the social group (Webster, 1979, p. 1723) or acquiring "the beliefs, behaviors, and values deemed significant and appropriate by other members of society" (Shaffer,

1988, p. 2). Gifted children do have the inclination to adapt to the group, but at what price? If one works very hard at fitting in with others, especially when one feels very different from others, self-alienation can result. In their desperation to belong, many “well-adjusted” gifted youth and adults have given up or lost touch with vital parts of themselves.

Social development is a much broader concept than socialization; it may be thought of as awareness of socially acceptable behavior, enjoyment of other people, concern for humanity, and the development of mutually rewarding relationships with at least a few kindred spirits. Lasting friendships are based on mutual interests and values, not on age. Gifted children often have friends much older or younger than themselves—particularly their e-mail pals. Self-acceptance is a related goal, as people who like themselves are more capable of liking others. When framed in this way, social development becomes a precursor to self-actualization, whereas socialization is merely the desire to conform, which may inhibit self-actualization. Roeper (1995) reminded us that the goal of education should be self-actualization rather than success.

The problem of fitting in with norms is particularly acute for gifted children. We educate children to want to be the best, to climb the ladder to the top, rather than be themselves. In fact, we are involved in a give-and-take exchange of emotions and actions throughout our lives. Gifted children need to be appreciated for who they are, not what they do, and they need to be given opportunities to appreciate and support others. The objective of both home and school should be to move them toward self-actualization. (p. 176)

If the aim for gifted children is social development rather than socialization, they need to be provided with true peers who are their intellectual equals, a program of humanitarian studies to enhance their awareness of global interdependence, and counseling for greater understanding, acceptance, and appreciation of self and others.

Emotional Needs, Emotional Development, and Emotional Maturity

The lack of precision in describing the social realm is also true in the emotional realm. It is necessary to differentiate between emotional needs, emotional development, and emotional immaturity. Gifted children have age-appropriate emotional needs and age-appropriate emotional reactions. But their emotional development is qualitatively different from their age-mates due to the impact of their greater cognitive awareness. Individuals

who are highly emotional are often considered “immature” in societies in which emotion is typically repressed. Sensitive gifted boys, for example, cry easily; this is often seen as a sign of “emotional immaturity” and used as a reason to hold them back in school.

Sommers (1981) introduced the term *emotional range* (p. 555), which may help to clarify these distinctions. In her study of cognitively advanced college students, Sommers found a high level of “emotional responsiveness” (p. 560). She attributed this responsiveness to “advanced cognitive organization” (p. 560).

All of the cognitive skills that were found to be related to the ability to respond with more emotions are marks of a highly organized awareness—an awareness that might be governed by a well-structured system of values, oughts, and beliefs, but not by momentary excitements. (Sommers, 1981, p. 560)

Therefore, the heightened emotional sensitivity and responsiveness often documented in the gifted (Clark, 1992; Genshaft & Broyles, 1991; Roedell, 1984; Whitmore, 1980) is directly related to their advanced cognitive development. We often see emotional intensity in gifted children, which is a positive sign of potential for advanced emotional development, according to Dabrowski’s Theory (Dabrowski, 1972), but it can easily be misunderstood as “emotional immaturity” in contexts in which intensity is not appreciated. Other researchers have also found gifted children to be emotionally mature on a variety of measures (Robinson & Noble, 1991).

One of the strongest personality factors found in parental descriptions of gifted children is emotional sensitivity. The following are examples from the files of the Gifted Development Center:

P [age 7] is quite sensitive to the feelings of others and has a well-developed sense of justice. She befriends the outcasts in her class. She comments to me if she feels her teacher is not treating children consistently. ... When she was 3 she burst into tears because I told her a snapdragon had “died” after being trampled.

A [age 4] is an exceptionally gentle and kind boy. I have never seen him hit or push and, in fact, have had to teach him that it is not good to let his little brother hit him. ... He is extremely loving (e.g., he sings, “I’m so glad when Daddy comes home” every day to me). He daily praises my wife and I for taking care of his baby brother. He has an intense love of games and frequently seeks out adults to play with him. When he plays with his friends, he will help them find the best move in a game and deliberately lose—all the while telling his friend how good *they* are

at the game. ... He is easily upset if he believes someone else has been treated unfairly (e.g., was sobbing because someone had taken his friend's toy—the friend was not crying).

These extraordinary levels of sensitivity and compassion do not disappear with maturity. A capacity for rich, intense emotions remains in the personality throughout the life span. Many adults, as well as children, who have deep feelings are called "too sensitive." This capacity for emotional responsiveness makes gifted individuals of all ages feel very vulnerable. Emotional intensity may even be seen as aberrant and in need of medication. It is important for therapists to recognize that emotional sensitivity and intensity come with the territory of giftedness; they are not dysfunctional.

Identification, Assessment, and Education of Asynchronous Children

As discussed earlier, identification and assessment of asynchronous children is best accomplished through individual intelligence testing, subjected to the clinical judgment of a practitioner who has a thorough grounding in the study of giftedness as well as experience assessing gifted children. (Silverman, 1997). The major reason that IQ tests have come under fire is their misuse. Just as education is an art form when an individual teacher is so aware of the student's zone of proximal development that he knows precisely what the next step must be in instruction to facilitate the child's development, assessment is an art form when an examiner has sufficient time, interest, knowledge, and rapport with a child to test the limits of the child's abilities with whatever tools are at hand, including the most important tool, observation. Unfortunately, mass education and testing supports neither this type of comprehensive assessment nor teaching as an art. Nonetheless, there are gifted teachers and psychologists who are indeed artists—who commune with a developing child's soul.

The higher the child's IQ, the greater the asynchrony. However, this does not mean that asynchronous development only applies to the highly gifted. The highly gifted provide a clearer picture of the phenomenon of giftedness, just as the profoundly delayed child is studied to grasp the full significance of retardation. There are varying degrees of giftedness just as there are varying degrees of retardation, and the child becomes more and more out-of-sync the more he or she diverges from the norm or the greater the discrepancies within his or her own developmental profile.

One other clarification is in order. Placement on an IQ continuum does not assign relative worth or value to the human being, nor does it predict who will be the most successful. From her research, Hollingworth (1940a,

1942) concluded that children in the 130 to 150 range have an "optimal" level of ability that permits adjustment to school and society. Beyond this range mutual rejection tends to occur, which can lead to psychological isolation of highly gifted children. Although the construct of asynchrony emphasizes qualitative differences, qualitative differences do not make a person "better" than others. It is only within a competitive, success-oriented framework that this misunderstanding occurs. Developmentally delayed children are also qualitatively different. That does not make them "worse" than others. The IQ test is simply a diagnostic tool to assist us in understanding individual differences and individual needs. Its greatest utility is in the extremes of the curve in the assessment of atypical development. When the information that can be gleaned from testing is not available, many very gifted children forced to conform to an inappropriate curriculum are perceived as emotionally disturbed, behaviorally disordered, or as having Attention Deficit Hyperactivity Disorder.

Assessment enables us to individualize a program for children with special learning needs. Unlike our current policies of using assessment procedures simply to determine whether a child is in or out of a gifted program, assessment should be the basis for program planning. This is the diagnostic-prescriptive method used in all other branches of special education. If this method were applied to the education of the gifted, then teaching to Vygotsky's zone of proximal development would become a reality. A related educational principle, the concept of optimal match, often attributed to the late Hal Robinson, is being implemented in some gifted programs.

Ideally, any effective educational program should provide an optimal match between the entry level of learners and the instructional level of learning experiences. One of the few psychological truths educators and psychologists agree upon states that the most learning occurs when an optimal match between the learner's current understanding and the challenge of new learning material has been carefully engineered. When the entry level of learners is generally high but extremely diverse, an appropriate program must be highly individualized. Children should be encouraged to progress at their own learning rate, which will result, in most cases, in subject-matter acceleration. The program should be broadly based, with planned opportunities for development of social, physical, and cognitive skills. (Roedell, 1989, p. 24)

For more guidance on appropriate educational practice, we turn again to the wisdom of Hollingworth. Not only was she the first counselor of the gifted, she also devised some of the most effective methods of educating this population, and her educational principles should serve as the basis for

current practice. From a philosophy she called *child-centered*, Hollingworth (1930, 1940b) observed that solutions to the social and emotional problems that beset the gifted could be effected most readily when they were placed in full-day programs with children of similar abilities. The design of her programs included fast-paced instruction; teaching basic skills in a half day (now known as *telescoping* or *compacting*); a challenging academic curriculum that motivated the students to work hard; study of the history and evolution of civilization; biographical study (bibliotherapy) to expose the children to gifted individuals who had sustained effort against odds and contributed to society; introduction to modern languages and literature; independent study and small group projects; extensive classroom discussion; student-designed curriculum around broad themes of knowledge; interdisciplinary studies to allow students to experience the interconnect-edness of the world; teaching the children how to handle the apparent foolishness of others with patience and love; helping them learn to balance candor with tact; and training in the fine art of argumentation, including "argument with oneself," the art and etiquette of polite disagreement with others, and public debate (Hollingworth, 1939, p. 585). Infused throughout this program was a beautiful set of human values: basic respect for humanity, awareness of our global interdependence, and commitment to service.

Studies completed after students were enrolled in this type of program for a period of 3 years revealed that the students did just as well in their academic subjects as those who had studied nothing but academics, they developed a love of learning through their self-directed learning experiences, and they were happier, having found friends and true peers—some of them for the first time in their lives (Hollingworth, 1930, 1940b). Follow-up studies indicated that Hollingworth's program had a profound, lifelong impact on the students' achievement, friendships, and values (Harris, 1992; White 1990). Harris (1992) asked some of these individuals, almost 70 years later, "From your point of view, what constitutes success in life? ... The replies ... quite evidently mirrored the curriculum. Their answers were strongly focused on societal connection, awareness and sensitivity to others as elements inseparable from self-actualization, and definitions of success" (p. 102).

Dreams for the Future of Gifted Education

It is my hope that we will be begin to understand that giftedness is a unique trajectory of development that requires a deep understanding of the self of each individual child. In this quest, we turn to Roeper for inspiration. Roeper (1995) wrote about developmental differences in the gifted, asyn-

chrony, inborn sensitivities similar to the overexcitabilities, and the important connection between emotions and intellect well before these concepts were synthesized into the construct of giftedness as asynchronous development. She urged us to adapt the curriculum to the inner agenda of the child.

Emotions cannot be treated separately from intellectual awareness or physical development. All three intertwine and influence each other. A gifted 5-year-old does not function or think like an average 10-year-old. He does not feel like an average 10-year-old, nor does he feel like an average 4- or 5-year old. Gifted children's thoughts and emotions differ from those of other children, and as a result, they perceive and react to their world differently. (p. 74)

Gifted children are different from the day they are born; they don't become different all of a sudden. Newborn babies have an awareness, a liveliness, and, sometimes, a nervousness that is quite apparent. We cannot have the same expectations of them that we apply to other children. In fact, we must forget about the usual expectations. We must expect the unexpected and accept this as the reality for these particular children. (pp. 144–145)

Gifted children are not better or faster than others, nor do they necessarily excel in the usually considered areas. They are basically different from other children. Very often, they are not skill learners; they are concept learners instead, so that in elementary school their giftedness may actually work against them. They have that special awareness. They are concerned with the complexities of the world. There are many factors, such as personal concerns, anxiety, or perfectionism, that might keep a gifted child from mastering school subjects, but we must be aware that what they do learn is often unique.

Their interests may be very specialized. The regular curriculum is not geared to the minds of the gifted, and yet they are expected to perform as if it were. (p. 146)

We need to become responsive to the individual differences of children and to allow children who have passionate interests to pursue them rather than conform to a prescribed curriculum. This is a tall order. We need to revitalize the educational process in keeping with Roeper's vision so that education can focus on the development and the growth of the self. "It is this inner self, the unique self of each human being that is the central point of their lives" (Roeper, 1995, p. 142).

The construct of asynchrony offers a child-centered perspective on giftedness. It enjoys a rich global heritage, from the insightful work of Hollingworth in the United States, Terrassier in France, Dabrowski in Poland, and Vygotsky in Russia. Its strong theoretical foundation is deeply rooted in the field of psychology. This is where the study of giftedness originated, anchored in the investigation of individual differences. The field has lost its psychological roots and is currently adrift in a sea of confusion. Is giftedness simply a social construction? Is it adult achievement? Can one only be "potentially gifted" in childhood? Should we forget about giftedness and try to develop talents in all children? From the perspective of asynchronous development, the answers to all of these questions is a resounding "No." These children are at serious risk for alienation if we do not begin to recognize their unique needs in early childhood and support their developmental differences.

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