

## CHAPTER 6

# Developmental Potential and the Growth of the Self

Michael M. Piechowski

Eagle and Hawk with their great claws and hooked heads  
Tear life to pieces; vulture and raven wait for death to soften it.  
The poet cannot feed on this time of the world  
Until he has torn it to pieces, and himself also.

Robinson Jeffers, *Memoranda*

In the developmental trajectory of human life, each phase is viewed as a preparation for the next one. Adulthood, the productive participation in the human community, is often viewed through the prism of an ideal norm. In their study of adolescence, Csikszentmihalyi and Larson (1984) expressed this view as follows: "A community needs people who are self-confident, motivated to achieve yet respectful of others, who are adaptable, original, and at peace with their own selves, more than it needs students who score high on tests" (p. 199).

But is it possible to be original, adaptable, and at peace with oneself, yet at the same time be a sensitive barometer of the undercurrents, conflicts, future trends, and tensions in society? Hardly. Rather, we must consider that such qualities are sorted out into different types of personality arising during different developmental circumstances. It is safe to say that individuals who are self-confident, achieving, adaptable, considerate toward others, and possibly even at peace with themselves come for the most part from families characterized by a distinctive style of parenting, which Baumrind (1970) called authoritative (Colangelo & Dettmann, 1985; Cornell & Grossberg, 1987). Originality, though not necessarily absent, is not the distinguishing characteristic here. Development of such individuals tends toward more or less stable patterns; it is less likely to be subject to frequent moves and uprootedness, and to feelings of being different, alien, or out of step with one's generation.

Piechowski, M. M. (1989). Developmental potential and the growth of the self. In J. VanTassel-Baska & P. Olszewski-Kubilius (Eds.), *Patterns of influence on gifted learners: The home, the school, and the self* (pp. 87-101). New York, NY: Teachers College Press.

Individuals who look for the unseen links in the structure of knowledge or in the fabric of a culture, to whom it is always important to find new patterns and to create new meanings, to see what no one has seen, to understand what no one has understood, to uncover what is hidden, who live to create, tend to come from a different kind of family. Their families tend to be less cohesive but more permissive (Domino, 1979; Getzels & Jackson, 1962). Their development is likely to be subject to disruptive changes, be it loss of a parent or a move to a new city or even to a new country and a new culture. The individual, and a gifted one especially so, brings into this contextual matrix something of her or his own: talents, special abilities, a level of energy, and a level of intensity. These personal qualities do not come as one package. The nature and magnitude of talent, the type and assortment of abilities, the area of concentration of energy (e.g., intellectual or emotional, or both) and its direction (inward, as in introversion, or outward, as in extroversion), and the type of intensity (as in the subjective intensity of feeling or in a performer's ability to project it) are so many different components whose particulars are unique to each individual. The personal qualities of how intensely things are experienced are gathered under the rubric of *developmental potential*.

### DEVELOPMENTAL POTENTIAL

Developmental potential (Dabrowski, 1972; Piechowski, 1986) includes talents and abilities, plus five primary components: psychomotor, sensual, intellectual, imaginal, and emotional capacities. Conceived broadly as five dimensions of psychic life, these primary components have many possible expressions:

1. Psychomotor (P)—movement, restlessness, drivenness, and an augmented capacity for being active and energetic
2. Sensual (S)—enhanced differentiation and aliveness of the sensual experience
3. Intellectual (I)—avidity for knowledge, discovery, questioning, love of ideas and theoretical analysis, and search for truth
4. Imaginal (M)—vividness of imagery; richness of associations; facility for dreams, fantasies and inventions, animisms, and personifications; and liking for the unusual
5. Emotional (E)—great depth and intensity of emotional life expressed in a wide range of feelings, compassion, attachments, a heightened sense of responsibility, and self-examination

Heightened intensity of experiencing is a quality in talented people. In fact, it is one of their strongest characteristics, manifested in varied and sometimes extraordinary ways. For example, for painters, "visual stimulation, reaction to things seen is intense, sometimes almost painful" (Roe, 1975, p. 167). For writers, emotions can be overwhelming in their range and intensity: "I feel too much, sense too much, am exhausted by the reverberations" (Sarton, 1970, p. 12). Enhanced imagination, passionate curiosity, extended range of intense feelings, and heightened energy are all signs of strong developmental potential (Piechowski, 1986). The question is, potential for what kind of development?

There are two basic kinds of development which may or may not be combined. One is the development of talent in the broad sense of creative work, be it scientific, artistic, or expressive performance. The characteristic of heightened intensity or experiencing represents the kind of endowment that feeds, nourishes, enriches, empowers, and amplifies talent. A study of artistically and intellectually gifted adults showed that both groups scored much higher than a comparison group on the dimensions of enhanced feeling, imagination, and intellectual passion (Piechowski, Silverman, & Falk, 1985). The artistically gifted subjects were particularly strong in the emotional dimension and imagination.

The other kind of development is personal growth guided by powerful ideals. It is characterized by moral questioning, existential concerns, and methodical self-judgment that guides the individual in the work of inner psychic transformation. This type of development, especially when intense and sustained, produces self-actualizing growth of the kind observed in spiritual leaders and other individuals of high moral character (Piechowski, 1986). The study of emotional growth in adolescents can help us to identify better the *potential* for this type of development, which in turn will lead us to better ways of nurturing the growth of self. In the terms of the paradigm presented here, the growth of self is a process by which a person finds an inner direction to his or her life and deliberately takes up the work of inner transformation.

### THE GROWTH OF SELF: TWO TYPES OF MATURATION

The self develops in terms of the knowledge of one's separate identity, particularly one's attributes, traits, and skills; and in terms of self-awareness, i.e., the awareness of how others see and appraise one, and self-consciousness, which is the knowledge of one's inner self. Mature self-awareness entails a sense of continuity of the self over time, a sense that the qualities

defining the self are unified (rather than being like so many loose pieces); as well as the sense of mutual understanding with others, that is, that the way I see myself is congruent with the way another who knows me sees me (Harter, 1983).

The most important developmental patterns in the adolescent advance toward self-understanding are

1. The shift from physicalistic to psychological conceptions of self
2. The increasingly volitional and self-reflective nature of self-understanding
3. The emergence of stable social-personality characterizations of self
4. The tendency toward the conceptual integration of diverse aspects of self into a unified self-system [Damon, 1983, p. 320]

These patterns are not completed by every adolescent; in fact, for many the process may continue well into adulthood. Integration of the self into a unified system is what Erikson (1968) described as the achievement of identity.

The processes characteristic of development of self-understanding appear in gifted adolescents early and can be articulated by some of them in a highly sophisticated manner. However, the typology of maturity that we found was twofold (Piechowski, Colangelo, Grant, & Walker, 1983). One type resembles Peck and Havighurst's (1960) rational-altruistic type, while the other is introspective, emotionally intense, and points to inner psychic transformation of the kind described by Dabrowski (1967, 1972).

The rational-altruistic type is in some ways akin to the foreclosure identity described by Marcia (1980). These individuals establish their identity without going through a developmental crisis. In Peck and Havighurst's (1960) description, such a person is

"rational" because he assesses each new action and its effects realistically, in the light of internalized moral principles derived from social experience; and he is "altruistic," because he is ultimately interested in the welfare of others, as well as himself. . . . He wants everyone to work constructively in some area and produce results useful to everyone. He sees relations with others as pleasant, cooperative effort toward mutual goals. . . . As an adult, he assumes an appropriate share of responsibility in his role as a member of a family, community, nation. . . . He reacts with emotion appropriate to the occasion. This does not mean he is unemotional, for he is enthusiastic about promoting what is good and aroused to prevent what is bad. [p. 8]

This describes many gifted youngsters and the mature and responsible adults they eventually become. Notice that this picture stresses adaptation to

social reality, a reality governed by laws and conventions, contracts and agreements. Although cooperative and democratic participation is stressed, this is still only an *external* social reality. Character development in terms of such adaptation cannot produce the kind of personal growth that results in radical inner change, which is necessary to achieve autonomy and a clear vision of universal ideals. There are other realities, then, which are *emotional* and *individual*. Maturation in terms of these realities entails emotional growth through developmental crises and represents the second introspective type of development. Some gifted children become engaged in this type of growth rather early. For many, however, introspective-emotional growth receives too little attention. Recognizing and cultivating this type of maturity in individuals for whom it is often denied any importance is the motivation for the work presented in this chapter.

### STUDY OF MATURATIONAL PATTERNS

The purpose of the study described here was to find individual patterns of emotional development. In this 2-year study, conducted in collaboration with Nicholas Colangelo at the University of Iowa, self-reports were collected from gifted youngsters who at the beginning of the project were 12 to 17 years old (Piechowski et al., 1983). The subjects were recruited from programs for the gifted in several junior and senior high schools in the state of Iowa. The youngsters were given an open-ended questionnaire with items asking them what evoked in them strong positive feelings, what stimulated their minds, what was their conception of self, and other such questions. The items were designed to tap the five primary dimensions of developmental potential mentioned earlier (Piechowski, 1979).

There were 19 youngsters who agreed to participate in the two-year follow-up. In most cases the individual features of emotional growth emerged when comparing the content of the responses from the first round with the second or follow-up round. There appeared two highly distinct and two less distinct patterns. Pattern A mirrored Peck and Havighurst's (1960) rational-altruistic type. Adolescents in this category seemed to mature predictably, in keeping with the demands of school and career as well as their active service to the community. Pattern B, the other distinct form, manifested itself in intense emotional growth and much less emphasis on academic and social achievement. Pattern C was less distinct in that it lacked the intensity and depth of Pattern B. Pattern D subjects showed no apparent growth issues. Pattern A was represented by three subjects (all age 19 and in college at the time of the follow-up), patterns B and C by seven subjects (ages 14 to 18), and pattern D by two subjects (ages 14 and 18). The study is exploratory,

meant only to suggest future lines of investigation, and the analysis of the material is of necessity impressionistic and intuitive. Because our interest here is in gaining insight into the growth of self, we shall focus our attention on the contrasting features of patterns A and B.

### **Pattern A: Rational-Altruistic**

In pattern A we notice concentration on the tasks at hand, hard work, and a sense of social responsibility. The responses are quite similar across the 2-year span. Here are a young female's answers, at ages 17 and 19, to the question, "What has been your experience of the most intense pleasure?":

My experience of most intense pleasure in academics so far has been when I did very well on a college entrance test. Because I did well then, I received many more honors since that have brought pleasure. [age 17]

My experience of the most intense pleasure was graduation day. I was leaving high school and moving ahead to college. On that day, I was recognized for my achievements. Besides the recognition, it was a personal victory—all that hard work had payed off, I had accomplished what I wanted to do. [age 19]

She answered the question, "What do you like to concentrate on the most as follows:

The things I like to concentrate on (center activities around) are in the order of importance: family, church and school, work. I like these things because they are the main thing in my life right now. The thing I like to concentrate on (think about) is myself. It may be egotistical but I am involved in so many things that I hardly have time to sit down and just think about myself—how things are, make decisions, decide my activities for the weekend, etc. [age 17]

It seems that I concentrate on the most whatever is at hand that is appealing at the time. Academically I like to concentrate on those subjects I know I will use someday or that I can apply in day to day life. [age 19]

In replying to the question, "If you ask yourself, 'Who am I?' what is the answer?" she wrote:

I am a 17 year old girl who is smart, dependable, responsible, tall, hardworking, but lazy at times, kind, active in clubs, has high ideals, who functions best in organized environment, somewhat slow, involved, and tired. [age 17]

I am an intelligent young woman who enjoys being with others and who likes to do things for them. I like to learn and I like to do things well. I am a person who likes things to be clearly defined—I want to know what is expected of me in a given situation. Right now, I am someone who is making difficult decisions about the future and what I really want to do with my life. [age 19]

In these responses we see a strong goal orientation. The framework is rational and altruistic. Satisfaction comes from involvement in many activities, service to others, and seeing clearly what ends it all serves. In another place she said, "I dislike activity that has no purpose." Such response could have come from a self-actualizing "doer" (Maslow, 1971), and, although we do not see here much emotional intensity, rich imagination, or intellectual thirst for knowledge, it is worth remembering that Eleanor Roosevelt, who had all these traits, also disliked activities that had no purpose.

### **Pattern B: Introspective-Emotional**

The type of emotional growth represented by pattern B has several characteristics. Not all of them have to be present at once, but, in the subjects from whose responses the examples below are drawn, at least four out of six of the following qualities are present in each case:

1. Awareness of growing up and changing; awareness of different growth possibilities or paths that are open
2. Awareness of feelings and conscious attention to them; interest in others and empathy toward them
3. Feelings of unreality present occasionally, marking periods of particularly intense emotional growth
4. Inner dialogue and self-judgment, at times quite severe
5. Searching or problem-finding; asking questions that are basic, philosophical, existential
6. Awareness of one's real self

Unlike many adolescents who either live for the moment or worry about the future, we find rather early in a number of gifted children an awareness

of their personal growth as well as anticipation and making ready for what is to come. One girl expressed it in several ways:

I think about what I am going to do when I get older. They are good thoughts. I seem to want to rush into life. . . . I fantasize about people I will meet in the future, places I will visit, friends I will make, where I will live. . . . I dream about being an adult. . . . It's sort of funny how us children dream about being older, and dream about the future and the adults dream about the past and being young again. [age 12]

I dream about how my life will be when I grow up. I dream lots and lots of ways I could be. [age 14]

At 17, in response to a question about what he pays attention to when reading books, a boy expressed an intense inner push for emotional growth:

I want to be moved, changed somehow. I seek change, metamorphosis. I want to grow (not just in relation to books, either).

Awareness of feelings and emotions gains importance. The same boy wrote, in response to a question about being poetic:

I find myself feeling more and more and thinking less and poetry is a means of expression for what I feel.

In reply to the question about who they were, several of the youngsters described themselves in distinctly emotional terms:

[I am] A person who needs attention and a person that needs to be accepted. He can't be turned away because he gets hurt easily. [male, age 16]

I am a very misunderstood person. . . . People think that my life is easy because I am talented, but I have a lot of problems of my own just because of these talents. I often even get cut down for something good that I do. This is very hard to cope with. I am a very sensitive and emotional person. I get angered or saddened very easily. I can also get happy easily. I think I like this part of me. All these emotions somehow make me feel good about myself. . . . I am not a very confident person, though people think I am. [male, age 16]

I am a person who has feelings . . . I have friends. I love life. I believe in Christ. Sometimes I forget who I am and lose my temper and get over angry, but doesn't *everyone!* NOTE: I HAVE FEELINGS. [female, age 12]

The note of insistence on feelings shows at once the frustration felt when they are ignored by others and how important they are to these gifted children's self-definition.

Empathy and understanding of others can be quite conscious, as it was for the girl just quoted:

I can see myself in other people, I can see things I've done in what other people do. I *really* understand people's thoughts and actions because I think of times I was in their place. [age 14]

Such expressions of understanding and caring for others are frequent in the responses of these youngsters.

Although adolescence is developmentally a time when interest in one's own and others' feelings comes to focus, the articulateness and insight of these gifted youngsters is rather exceptional. The emotional maturity and sensitivity that some proportion of adolescents achieve in late adolescence appears in the gifted—those engaged in emotional growth—in early adolescence.

Periods of intense emotional growth can bring on such sudden inner shifts as to produce moments of disequilibrium and estrangement in which one feels at odds with the surroundings, as if suddenly alien to what was familiar before. Such feelings of unreality are not a cause for concern, by themselves. What calls for concern is the fact that great emotional intensity and sensitivity combined with high intelligence make a youngster acutely aware of the precariousness of human existence and, in fact, of our world. Because of this, and because others have so little understanding of this, gifted children can be extremely vulnerable and at risk (Leroux, 1986; Roedell, 1984).

Feelings of unreality are the inevitable product of great intensity of feeling, of feeling "different" and experiencing a rapid shift in perspective.

Sometimes when I am just standing there I kind of go into a little daze and am sort of unaware of where I am. I look at the people and things around me and think it's all unreal. I wonder why I'm me, why God created an earth. Sometimes I just feel like everything around me including myself is just part of a dream. [female, age 14]

Sometimes I think I am going insane and I wish I had someone intelligent to talk to. [another female, age 16]

In the next excerpt, the feeling of unreality is combined with emotional experimentation in the form of thinking of the parents as strangers, which can be interpreted as a step toward individual autonomy.

When I ask myself who I am, sometimes I wonder if I'm *really* here. Or, I'll look at mom and dad and ask myself, who are these people, and I try to picture them as total strangers. [female, age 15]

Inner dialogue and self-judgment are an essential part of moral growth. Although in his cognitive theory of moral development Kohlberg minimized the importance of emotions, the penetrating genius of William James (1902) saw a definite and necessary link between the strength of one's emotions and moral character. For there to be congruence between beliefs and actions, a person must feel the issues with passion. For James, moral questions are real questions only to those who feel them so strongly that they feel called by them to an active response. They are not problems to reason out but problems the heart knows how to answer more quickly and more immediately. Self-judgment, then, is an evaluation of one's own self, and no personal process of evaluation is possible without the appraising mechanism of feeling (Bowlby, 1969). Without feeling, our subjective life would be just so many bits of data washed of color and meaning.

Here are some examples of how these youngsters monitor themselves. Their sensitive conscience is fitted with a spur to self-correction—the opposite of most adolescents, who, being highly self-conscious and greatly concerned about how they are noticed, tend to be lacking in self-judgment. The following inner dialogue was a response to the question, “Do you ever think about your own thinking? Describe.”

I sometimes think of things I think are fun and others think otherwise. That's when I think about *my* thinking. [male, age 15]

When I take a stand on something, I later wonder why I did that. I think about how I came to that conclusion. I think about if I was right, according to the norms of society. I think about my friends and other people I know and wonder if I really feel the way I let on, and if I am fooling myself by thinking things I really feel. [the same male at age 17]

The issues of right and wrong figure prominently here. This activity in itself is not unusual, but the process of sorting them out is already strongly auton-

omous. He examines the origin of his convictions and asks himself whether they are genuine or perhaps just self-deceptions. For contrast, here is another 17-year-old's response to the question, “In what manner do you observe and analyze others?”

*Critically.* I have an unusual ability for finding people's faults and discovering their vulnerabilities. I use this knowledge, too—sometimes even unconsciously. . . . I am a manipulator, and it sometimes bothers me. I know how to handle friends, family, teachers, etc., which makes things comfortable for me but does sometimes bother my conscience. (Fleeting, though.)

One might be inclined to wonder whether the future development of this boy will lead him to continue to muffle his conscience and become an even more skillful puppeteer, pulling the strings of others to his own advantage. This does not seem likely in his case, because, in answer to the question about what most attracts his attention in a book, he wrote that the characters were important and that he wanted “to be able to understand them and relate to them—to sympathize with them.” He is the one who wrote, “I want to be moved, changed somehow.” A person to whom such feelings are important is not likely to ignore them in others nor the impact of his actions on others. In another study Colangelo and Brower (1987), reported that their gifted subjects who were included in programs for the gifted worried about how it made their siblings feel who were not.

Searching, inquiring, and problem-finding are those special abilities (Getzels & Csikszentmihalyi, 1975) by which one discovers things that need discovering, questions that need to be asked, and problems that have yet to be conceived. Self-scrutiny, questioning, and the search for truth go together. Gifted youngsters often ask basic, philosophical, and existential questions. Somehow they develop not only a sense of objective truth but of inner truth as well.

Lots of times I wish I wouldn't think so much. It makes me very confused about a lot of stuff in the world. And I always wish I could think up answers instead of just questions. . . . My parents and all my adult friends don't understand. I wish I could talk to somebody who would have the same questions I do, *and* the answers to them. Maybe instead of somebody intelligent, I need somebody insane. [female, age 16]

In Delisle's (1984) extensive collection of responses from younger children, one can find similar responses about arguing with teachers or persistently asking questions. Moral concerns and evaluations, however, and issues

of personal responsibility, are more typical of adolescents. Here are two examples:

I think about my morals and what I really think is right and wrong. I often find that how I feel is a contradiction of what society thinks. This makes me wonder if there is something wrong with me. I concentrate on why and how I became this way and if I will always be this way. [male, age 17]

I live day to day like everyone else, but I am continually frustrated with the shallowness of how we live and relate to one another. Sometimes I hate myself because I am lazy and I feel unable to change. [female, age 16]

We see in these excerpts keen questioning and self-scrutiny. These youngsters are not only gifted in terms of their talents and abilities but in terms of character growth: They sincerely want to become morally responsible persons. Their self-knowledge is impressive for this age. Gardner (1983) proposed as a separate intelligence the knowledge of one's inner life, that is, the capacity to tell shades of feeling instantly, "to draw upon them as a means of understanding and guiding one's own behavior" (p. 239). He pointed out that certain cultures revere individuals who have access to their "real and direct feelings"; the Japanese call it *jikken* and cherish the person attuned to his own *jikken* (p. 273).

Awareness of one's real self appears early in those engaged in intense emotional growth. Gifted youngsters quickly realize that their self-knowledge, the way they know and understand themselves, differs from the way others see and know them. They thus realize that their real self is hidden from others and they can even be aware of keeping it that way.

I'm somebody no one else knows. Some people see one part of me, others see other parts; it's like I'm acting. The real me is the one inside me. My real feelings, that I understand but can't explain. . . . My best friend is myself. [female, age 14]

The sense of an autonomous and individual self which develops in adolescence is sometimes expressed very strongly. This is perhaps especially so when it appears early, that is, in someone who is still perceived as a child:

[I am] an individual! I'm me, and I can choose to do what I want, be what I want, make my own decisions, and just be me. I find it very

hard to respect someone who "follows the crowd" and refuses to be an individual. I was put on the earth as an individual and that's just what I intend to always be. [female, age 14]

The development of self-awareness and self-understanding of these gifted youngsters traces the general direction described for adolescents by Broughton (1980), Selman (1980), and others. What is distinctive in the gifted is an acceleration of development and a greater intensity of existential questioning. Of great importance is the value they place on their emotional side. It is not just awareness of having moods, feelings, and emotions that is noticeable; what stands out is also the realization that these are a distinct and essential part of one's self and for this are to be cherished.

## CONCLUSION

With today's increased concern over lack of moral leadership, understanding the nature of emotional growth of the gifted needs our attention all the more. Two types of emotional growth were described in this chapter. The rational-altruistic type fits rather neatly into the socially favored model of hard-working sensible achievement and altruism. The other, the introspective-emotional type, demands understanding and considerable patience in regard to the extraordinary emotional sensitivity and intensity it presents. Because it seems so excessive, irrational, or immature, others often find it very difficult to live with. Here is a quote from a highly gifted young undergraduate, describing what it feels like to be different and to be living with an intensity incomprehensible to others:

I am a "deviant." I am often considered "wild," "crazy," "out of control," "masochistic," "abnormal," "radical," "irrational," "a baby" . . . or simply too sensitive, too emotional, or too uptight. "Mellow out," . . . they say, to which I can only respond, "If I only could . . ." At birth I was crucified with this mind that has caused me considerable pain, and frustration with teachers, coaches, peers, my family, but most of all with myself. [Piechowski, 1987, p. 22]

Yet here we find the most deeply human potential. William James (1902), as noted earlier recognized how emotional intensity joins with superior intellect to create a genuinely moral person, someone for whom questions of personal responsibility engage both the emotions and the will. While a person like this may be difficult to understand and to deal with on a daily basis, she or he is nonetheless crucial in the greater scheme of the evolution of human potential (Feldman and Goldsmith, 1986).

## REFERENCES

- Baumrind, D. (1970). Socialization and instrumental competence in young children. *Young Children*, 26, 104-119.
- Bloom, B. S. (1985). *Developing talent in young people*. New York: Ballantine.
- Bowlby, J. (1969). *Attachment*. New York: Basic Books.
- Broughton, J. (1980). The divided self in adolescence. *Human Development*, 24, 13-32.
- Colangelo, N., & Brower, P. (1987). Labeling gifted youngsters: Long-term impact on families. *Gifted Child Quarterly*, 31, 75-78.
- Colangelo, N., & Dettmann, D. F. (1985). Families of gifted children. In S. Ehly, J. Conoly, & D. Rosenthal (Eds.), *Working with parents of exceptional children* (pp. 233-255). St. Louis, MO: Mosby.
- Cornell, D. G., & Grossberg, I. N. (1987). Family environment and personality adjustment in gifted program children. *Gifted Child Quarterly*, 31, 59-64.
- Csikszentmihalyi, M., & Larson, R. (1984). *Being adolescent*. New York: Basic Books.
- Dabrowski, K. (1967). *Personality shaping through positive disintegration*. Boston: Little, Brown.
- Dabrowski, K. (1972). *Psychoneurosis is not an illness*. London: Gryf.
- Damon, W. (1983). *Social and personality development*. New York: W. W. Norton.
- Delisle, J. R. (1984). *Gifted children speak out*. New York: Walker.
- Domino, G. (1979). Interactive effects of achievement orientation and teaching style on academic achievement. *Journal of Educational Psychology*, 62, 427-431.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: W. W. Norton.
- Feldman, D. H., with Goldsmith, L. T. (1986). *Nature's gambit: Child prodigies and the development of human potential*. New York: Basic Books.
- Gardner, H. (1983). *Frames of mind*. New York: Basic Books.
- Getzels, J. W., & Csikszentmihalyi, M. (1975). From problem-solving to problem finding. In I. A. Taylor & J. W. Getzels (Eds.), *Perspectives in creativity* (pp. 82-112). Chicago: Aldine.
- Getzels, J. W., & Jackson, P. W. (1962). *Creativity and intelligence*. New York: John Wiley.
- Harter, S. (1983). Developmental perspectives on the self system. In P. H. Mussen (Ed.), *Handbook of child psychology*, (4th ed.) (pp. 275-385). New York: John Wiley.
- James, W. (1902). *The varieties of religious experience*. New York: Modern Library.
- Leroux, J. A. (1986). Suicidal behavior and gifted adolescents. *Roeper Review*, 9, 77-79.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology*. New York: John Wiley.
- Maslow, A. H. (1971). *The farther reaches of human nature*. New York: Viking.
- Peck, R. F., with Havighurst, R. J. (1960). *The psychology of character development*. New York: John Wiley.
- Piechowski, M. M. (1979). Developmental potential. In N. Colangelo & R. T. Zaffrann (Eds.), *New voices in counseling the gifted* (pp. 25-57). Dubuque, IA: Kendall/Hunt.
- Piechowski, M. M. (1986). The concept of developmental potential. *Roeper Review*, 8, 190-197.
- Piechowski, M. M. (1987). Family qualities and the emotional development of older gifted students. In T. M. Buescher (Ed.), *Understanding gifted and talented adolescents* (pp. 17-22). Evanston, IL: Northwestern University, Center for Talent Development.
- Piechowski, M. M., Colangelo, N., Grant, B. A., & Walker, L. (1983, November). *Developmental potential of gifted adolescents*. Paper presented at the National Association for Gifted Children annual convention, Philadelphia, PA.
- Piechowski, M. M., Silverman, L. K., & Falk, R. F. (1985). Comparison of intellectually and artistically gifted on five dimensions of mental functioning. *Perceptual and Motor Skills*, 60, 539-549.
- Roe, A. (1975). Painters and painting. In I. A. Taylor & J. W. Getzels (Eds.), *Perspectives on creativity* (pp. 157-172). Chicago: Aldine.
- Roedell, W. C. (1984). Vulnerabilities of highly gifted children. *Roeper Review*, 6, 127-130.
- Sarton, M. (1970). *Journal of a solitude*. New York: W. W. Norton.
- Selman, R. L. (1980). *The growth of interpersonal understanding*. New York: Academic Press.