

Enhancing Learning Outcomes for Diversely Gifted Adolescents: Education in the Social/Emotional Domain

Dona J. Matthews

Publication: *The Journal of Secondary Gifted Education*, 10, 157-168 (1998)

An earlier version of this paper was presented in a symposium on School Climates; American Educational Research Association; March, 1997; Chicago

Abstract

Two major problem areas are addressed. First, young women and students from minority groups, who continue to be underrepresented at the highest career achievement levels, tend to find social/emotional issues more salient than they find standard academic fare. Secondly, and more broadly, the world is a rapidly changing and increasingly dangerous place, requiring stronger networks of support than ever, particularly at transitional stages like adolescence. Unfortunately, however, many of the traditional support systems, like family and community, are dissolving and disintegrating. An empirically and theoretically defensible approach to addressing both of these areas of concern is the implementation of a Human Development course of study, starting early and building systematically over time. In such a course, students could be helped to construct principled understandings of social and emotional functioning, becoming more aware of the benefits of social diversity, and wiser decision-makers. Applications appropriate for working with gifted secondary school students are discussed.

Problems Under Discussion Gender, Culture, and Achievement

Just over thirty years ago, Brian Moore's (1966) novel, *I Am Mary Dunne*, was published. A disturbingly vivid illustration of feminist issues, it constitutes a still-relevant and psychologically accurate case study of what happens when a sensitive and intelligent woman is dependent on and constrained by others for many aspects of her survival and social position: an objectification of the self, a pervasive insecurity, and an emerging sense of depression and/or madness resulting from the loss of an authentic sense of self. A fictional exploration of similar alienation and disenfranchisement issues relating to being black in America can be found in Richard Wright's *Native Son* (1940).

While women are no longer prohibited from entering most professions, there continue to be many subtle and powerful influences working against their achieving at levels commensurate

with their ability, most markedly at the highest ability and achievement levels. In a discussion of adolescent development from a global perspective, Petersen, Silbereisen, & Sörensen (1996) provided research findings showing sex differences across many cultures: boys tend to be significantly more self-confident and better adjusted than girls, demonstrating better self-control, less vulnerability, more pride, and a higher subjective sense of well-being. Girls show a decline over the adolescent period; by the age of seventeen, their emotional tone and sense of well-being are much lower, and they are suffering from many more symptoms of depression than are boys. Findings were included in this review showing girls as more susceptible to many affective disturbances, including sleep problems, stress, and negative self-appraisal.

In attempting to understand these findings, Petersen et al. (1996) cited a number of ethnographic accounts indicating that girls are routinely subjected to more restrictions than boys at puberty, from severe limits on their freedom of movement and dress, to less free time as a result of increasing household responsibilities. Boys, they concluded, are more likely to be encouraged to pursue their education and to be less supervised in their pursuits. Young males, then, are more likely to be given opportunities through their adolescent years for exploration, self-discovery, and the development of autonomous competence than their female peers. Gifted females are at a serious disadvantage in the development of their gifted-level ability.

Counter to prevailing public opinion, there have been no changes in recent decades in the attributes, attitudes, or strength of sex stereotypes in the U.S. (Bergen & Williams, 1991). At early adolescence, girls continue to show evidence of lower self-esteem than boys across all domains (Bolognini, Plancherel, Bettschart, & Halfon, 1996). One of the longterm implications of these facts is illustrated by a major longitudinal research program that followed high school valedictorians (Arnold, 1995). As the subjects in this study proceeded through university and into adulthood, there was a steady lowering of the women's aspirations and goals, accompanied by a drop in their self-esteem, a decline that was not experienced by their male counterparts. The more intellectually capable a young woman is, the more she has to lose by this social dynamic.

Some observers have concluded that the situation has actually become worse for girls over the past thirty years (Pipher, 1994). Developmental supports have weakened dramatically in an era of rampant divorce and geographical mobility, while the stressors through adolescence have intensified, including an increasing sexualization and objectification of females in the media. Girls are experiencing more pressure than ever to go underground emotionally and conform to stereotypes, relinquishing connection with their authentic selves, a condition which has been called "losing their voices", and which is most pronounced for those girls who had previously shown the highest levels of intellectual ability and curiosity (Gilligan, Lyons, & Hanmer, 1990).

A similarly troubling situation undermines the likelihood of career success for students who are members of many racial and cultural minority groups. Describing both females and members of minority groups, Farmer (1987) noted the occurrence of a reduction in status attainment somewhere between high school and adult employment. One explanation for this is the identity conflict experienced when cultural values and habits clash with mainstream perspectives: "Culturally diverse groups battle internally a dual value system message: one that calls for subgroup loyalty and adherence to tribal, family, and cultural traditions, and the other

that calls for individual excellence in a mainstream world." (VanTassel-Baska, Olszewski-Kubilius, & Kulieke, 1994, p. 190)

One might hope that educational institutions would recognize and address these problems of the systematic disempowerment of many of the most gifted members of society. However, it appears that schools are more often part of the problem than part of the solution. Considering gender equity issues, Bailey (1993) concluded that the school climate is less encouraging for girls than boys across many indicators, including teacher-to-student and student-to-student interaction patterns, curricular materials, assessment methods, and participation in extracurricular activities. Similar findings emerged in the Wellesley College Center for Research on Women Report (1992). The situation is at least as troubling when issues concerning race, achievement, and schooling are considered (Ford, Grantham, & Harris, 1996): school is typically perceived as irrelevant by many students from minority backgrounds, decreasing motivation and interest in education, and thus substantially reducing the likelihood of gifted levels of career achievement.

Problems More Broadly Defined: Societal Issues

Problems described here for gifted adolescent girls and minority group members can be seen as components of a larger network of society-wide problems. The current era has been described as a period of social disintegration, with indications that wise decisions are not being made by many individuals and communities (Gottlieb & Sylvestre, 1996). Families have become less able to nurture and support adolescents in their developmental work, at the same time that the world is getting more dangerous for them, with the greatly increased availability and lethality of drugs, peer violence, and sexually transmitted diseases (Hurrelmann & Hamilton, 1996).

In their exploration of social support issues at adolescence, Cauce, Mason, Gonzales, Hiraga, and Liu (1996) described adolescence as a pivotal developmental period, with life stress steadily increasing through childhood and into early adolescence. The findings cited show an increasing divergence between those who successfully navigate this vulnerable period and those who do not.

In a discussion of governance issues that pertain to current research findings, Keating (1995) argued that as the pace of change accelerates, it becomes increasingly important to attend to social issues, to ensure that as many people as possible are provided with the basic requirements for healthy human development. Using data gleaned from global sources, Keating demonstrated that prosperity and population health depend on this approach being taken. Rather than getting caught up in the whirlwind of change, he concluded, it is better that decision-makers invest in understanding the fundamental processes of human development, including the social nature of the species, and the fact that the social environment in which we develop influences many aspects of how competent we become.

A Proposed Solution: Education in the Social/Emotional Domain Empirical and Theoretical Support for Social/Emotional Domain

There is considerable support accumulating for conceptualizing the social/emotional domain somewhat separately from and parallel to other educational domains, such as the linguistic and mathematical. Although there are many bits and pieces of programming in place in most schools that address the social/emotional needs of students (e.g., AIDS awareness, drug education, and career guidance), they tend to be offered in discrete topic packages, with little by

way of integration with each other, with the rest of the curriculum, or with students' lives. Social/emotional development is generally not understood as a domain requiring the long-term, systematic, and coherent curriculum design approaches that most educators recognize as essential for intelligent curriculum planning in mathematics and other subject areas.

Gardner's Multiple Intelligence theory (1983) provides one way of thinking about the social/emotional domain and its possible relevance to schools. In describing what he called the personal intelligences (including intrapersonal and interpersonal), Gardner posited these areas as being critically relevant to healthy human functioning: "...in the day-to-day world no intelligence is more important than the interpersonal...We need to train children in the personal intelligences in school." (quoted by Goleman, 1995, p. 42)

I have been engaged for the past several years in a study of early adolescence, considering issues of diversity in high level competence, focusing particularly on three domains of functioning: linguistic, logical-mathematical, and social (Keating & Matthews, 1990; Matthews, 1993, 1997; Matthews & Keating, 1995). The results of our data analyses have been strongly supportive of a domain-differentiated approach: students' gifted-level educational needs can be more accurately and usefully identified separately as mathematical, linguistic, and/or social, rather than global (such as provided, for one example, in a full-scale intelligence test score).

Our analyses have suggested that individuals' particular areas of competence can be seen as arising from their developmental histories, as these have led to certain habits of mind that are more and less compatible with different kinds of intellectual pursuits (Keating, 1990; Matthews & Keating, 1995). Girls' scores across a number of measures demonstrated significantly more competence and interest in the social domain than those of their male counterparts; girls are not only seen by their peers as more competent in this area, but they also ascribe higher values to social goals, and are engaged in more social domain hobbies. All of this is of course consistent with an important aspect of sex differences in developmental histories: gender socialization practices encourage sociability as considerably more important for girls than boys (Dinnerstein, 1976; Gilligan, 1982; Petersen et al., 1996).

Our domain-specificity results are consistent with neurology-based findings that suggest that social/emotional functioning is somewhat autonomous, in addition to being essential to cognitive competence. Damasio (1994) wrote that, "Emotional life is a domain that, as surely as math or reading, can be handled with greater or lesser skill, and requires its unique set of competencies." (p. 36) Damasio observed that the social/emotional domain is closest to our survival and to our destiny, and that it involves the greatest uncertainty and complexity, requiring the greatest social support if healthy development is to occur.

As understanding accumulates of the essential role that emotion plays in cognition, the importance of social/emotional development is in the process of being reconceptualized (Goleman, 1995; Salovey & Sluyter, 1997). Goleman proposed that, rather than declaring wars on drugs, poverty, violence, et cetera, we ought to be providing our children with the skills they need to avoid these problems, and that the best way to do this is through educational intervention that starts early, and is systematic through all the years of schooling. Initiatives at all stages can

be productive; for secondary school educators working with gifted students, such initiatives can be argued as essential.

In his research with child prodigies, Feldman (1986) noted a striking sex imbalance in the identification of prodigious talent, to the extent that he was unable to find a girl to include in this report on his findings. He ascribed the imbalance to environmental factors, and argued for a valuing of the social/emotional domain at a level that would be equal to other highly-valued domains such as the linguistic and mathematical: "Less obvious as a source of prodigies, but possibly more important, will be those domains that are of great importance to humanity but that have been undervalued, particularly those that have been traditionally considered as 'feminine'. I am thinking of domains that emphasize moral and ethical development, realms of human endeavour that involve the understanding of others' points of view, cooperative enterprise, negotiations, and compromise. These domains are less well defined because there have been fewer efforts to formally chart their levels, create technologies, or build formal pedagogical traditions." (p. 89)

Feldman's description of domains that reflect feminine values is striking in its similarity to descriptions of African-Americans' experiences and values. In a discussion of multicultural issues, Shade (1994) cited evidence that black students are more likely than whites to be relational, social, holistic, global learners. The argument made by Ford et al. (1996) for multicultural education included many ideas and outcomes relevant to education in the social/emotional domain as conceptualized here: that schools should work toward helping all students accept their ethnicity as an essential component of their identity; develop an ethic of social justice; acquire a sense of independence and interdependence; and increase their personal and social responsibility. These issues are particularly salient for gifted secondary school students, who require engagement with large personally-relevant abstract principles in order to thrive intellectually (Egan, 1997).

Creating a Structure for Social/Emotional Learning: A Human Development Course

The proportion of females and minority group members in the top ranks of career achievement continues to be a topic of valid concern. The problem goes farther than that, however: many highly able adolescents of all description are opting out of academic engagement. This problem has roots deeply into the culture, and throughout our social systems. Several proponents of gifted education, in addressing this problem, have suggested the implementation of comprehensive social/emotional strategies. Examples include Feldhusen (1992), who recommended four domains of talent development for schools to consider separately, of which the interpersonal-social was one. In a consideration of the problem of suicide among gifted adolescents, Farrell (1989) concluded that schools should offer programs that focus on increasing students' awareness of the internal and external stressors being placed on them, and assist them in developing coping strategies, as a scheduled part of the curriculum, like history or science. In a study of self-concept and social support in advantaged and disadvantaged seventh and eighth grade gifted students, VanTassel-Baska et al. (1994) described a need for both girls and minority group members to be actively assisted in developing a strong sense of self, defining authentic life and career goals, and developing philosophies of life that facilitate healthy self-concept.

From an analysis of relevant sociological research, Hurrelmann (1996) concluded that schools' potential to provide social support should be strengthened, recommending that, because of schools' importance and near-universality in adolescents' lives, they should be used as loci for socially supportive measures. Adolescents, he observed, must be supported in their well-being and self-esteem, as well their living conditions and integration into the social network. In addition, he emphasized that adolescents need real challenges and involvements with society other than as consumers. For gifted learners, those who have already surpassed their age-peers in content mastery in school subject areas, meeting this need becomes even more essential to their well-being.

Given the widespread alienation and disenfranchisement in female and minority development, and the problems of adolescents generally in a time of a rapidly disintegrating social fabric, in the context of unassimilably fast technological, familial, and social change, it can be concluded that gifted learners need to be helped to develop the resiliency and coping skills they will need to reflect on their choices and make wise decisions for themselves. One place that this can happen is in our schools, which constitute a cultural institution in which almost everyone participates, and at developmental stages in which people are still flexible in their identity and life choices. A structure that schools might incorporate to provide social/emotional learning is a Human Development course that would start when students are young, and proceed developmentally with them through to the end of high school (Matthews, 1996, 1997; Matthews & Keating, 1995; Matthews & Smyth, 1997).

In a discussion of gender and race as they interact, Pollard (1993) observed that many studies take a deficit-oriented approach to behaviour, emphasizing minorities' and women's failures to perform like white boys, ignoring evidence of their successful performance. A carefully-developed and rigorous Human Development course would target areas of strength for girls and low-achieving racial minorities, providing an alternative way for them to be intelligent in a school-recognized domain, and enhancing the possibility of their continued engagement in school.

A consortium of educators, researchers, foundations, and policy and community leaders has come together in the Collaborative for the Advancement of Social and Emotional Learning (CASEL), operating originally from the Child Study Center at Yale University, and now from the University of Illinois at Chicago. This consortium is committed to promoting social and emotional learning as an integral part of education, and has attracted the active participation of many leading academic researchers, including James Comer, Mary Schwab-Stone, Myrna Shure, Robert Slavin, and Roger Weissberg, among many others. They are committed to the implementation of social and emotional programming as part of every school's curriculum (Salovey & Sluyter, 1997).

In considering ways that culture can be nurtured such that society better nurtures its constituents, Bruner (1996) made some strong recommendations for the incorporation of a social/emotional academic subject area. He suggested that schools need to teach "the subject closest to life, closest to how we live...the human Present, Past, and Possible...Teachers and students can be just as tough-minded in understanding these tender-minded topics as they can about quadratic equations or the conservation of mass -- and we had better be in the interest of

survival." (p. 87) He went on to write that teaching such a subject requires different skills and sensibilities, and more courage, than the more traditional subject areas.

In his bestselling treatise on emotions and their importance to individual and collective life, Goleman (1995) argued that because many children are not being given the social/emotional training they need at home, schools are the one place in the community where we have an opportunity to compensate for the serious emotional deficits that are so widespread. He discussed the concept of emotional illiteracy, describing it as problematic that schools are not more involved in addressing deficits in this domain. Goleman reviewed several programs in place that attempt to provide students with opportunities for learning in the social/emotional domain, and concluded on the basis of considerable data that, "Being emotionally literate is as important for learning as instruction in math and reading." (p. 262).

In their comprehensive study of girls and schools, the Wellesley College Center for Research on Women (1992) concluded that all students need to be supported in becoming socially and emotionally competent: "Schools must help girls and boys acquire both the relational and competitive skills needed for full participation in the work force, family, and community." (p. 2, italics in original) This report devoted a chapter to "the evaded curriculum", which it defined as "matters central to the lives of students and teachers but touched upon only briefly, if at all, in most schools...includ[ing] the functioning of bodies, the expression and valuing of feelings, and the dynamics of power" (p. 75)

Human Development Course: The Curriculum

Many high schools have patchworks of social/emotional domain topic areas already in place in various subject areas and at various grade levels. For example, sex education is often taught by the physical education teacher in a unit on Health; career guidance is often given some kind of attention, frequently through the use of career inventories, and/or college calendar course choices; some aspects of human development are covered in courses with names like Families in Society. Many of these are seen as compulsory frills, topics that must be covered to satisfy some kind of guideline or law, but that are not seminal to students' educations. Others are seen as low-demand courses for students who cannot manage harder work. Although the Human Development course being proposed here would include all of these topics, it is much closer in demands on students' engagement to Bruner's conceptualization quoted above of work that might in fact be harder than that done in other subject areas, requiring considerable knowledge and courage on the part of the teacher, and serious application on the part of the students.

There are many ways to think about what ought to be included in the curriculum of a Human Development course. The general idea is captured very well, I think, by Bruner's phrase, the "human Present, Past, and Possible" (Bruner, 1996, p. 87). Overall goals can be seen in the four ideas that he recommended be incorporated by all schools in their educational agendas: agency (taking more control of one's mental activity); reflection (making learning make sense); collaboration; and culture.

A useful angle on the organization of such a course comes from Gardner's idea of the Personal Intelligences (1983), whereby content might be broadly described as comprising self-awareness (intrapersonal), and awareness of others (interpersonal).

The suggestions made by Feldman (1986) and mentioned above are all important aspects of a Human Development curriculum: moral and ethical development, the understanding of others' points of view, cooperative enterprise, negotiations, and compromise. These suggestions reflect an interpersonal focus, but can only be meaningfully mastered in the context of mature self-knowledge and intrapersonal development.

Goleman (1995), in a thoughtful and comprehensive exploration of social/emotional developmental issues, strongly recommended that schools work toward establishing a Human Development focus, and provided detailed descriptions and analyses of many of the projects in place that are attempting to do this, including practical and specific curriculum suggestions. In the preface to the book, he synthesized his findings: "This means that childhood and adolescence are critical windows of opportunity for setting down the essential emotional habits that will govern our lives...I can foresee a day when education will routinely include inculcating essential human competencies such as self-awareness, self-control, and empathy, and the arts of listening, resolving conflicts, and cooperation." (Goleman, 1995, p. xiii)

Recommendations made by Goleman for schools' social/emotional curricula included, in the interpersonal area: nurturing relationships and keeping friends; accurately analyzing social situations; having empathy, taking others' perspectives; listening, resolving conflicts, and cooperating; reading social and emotional cues; being able to resist negative influences; and developing leadership abilities. Intrapersonal factors included self-awareness, both of our moods and of our thoughts about those moods; identifying, expressing and managing feelings; self-control, impulse-control, and the ability to tolerate the delay of gratification; the regulation of emotion to keep distress from swamping thought; the ability to motivate oneself, and persist in the face of frustration; optimism, hope; and the capacity to engage in flow (the harnessing of emotions in the service of performing and learning, near the summit of ability, where the challenge is sufficient for anxiety and performance to be optimal).

Another way to organize learning in a Human Development course has been suggested by Salovey and Mayer (1990), who subsumed Gardner's two personal intelligences into one social/emotional domain, and described five areas within this domain: (1) self-awareness; recognizing a feeling as it happens; (2) managing emotions; self-soothing, shaking off anxiety, gloom, irritability; (3) motivating oneself; marshalling emotions in the service of a goal, delaying gratification; stifling impulsivity; being able to move into flow; (4) recognizing emotions in others; empathy; altruism; and (5) handling relationships; skill in managing emotions in others; popularity, leadership, interpersonal effectiveness.

In order to increase the likelihood of girls remaining academically engaged, it is important to ensure that issues particular to their development are explicitly addressed: the functioning of their bodies, the expression and valuing of their feelings, and the dynamics of power (Wellesley College Center for Research on Women, 1992). It is similarly important that issues experienced by minority group members be addressed, that students develop a complex

view of differences, and affirm the importance of diverse relationships in their lives (Gilligan et al., 1990). As mentioned above, it is important that schools facilitate all students' accepting their cultural roots as an essential component of their identity; developing an ethic of social justice; becoming both independent and comfortably interdependent; and making commitments to meaningful personal and social responsibility (Ford et al., 1996).

There are many ways to structure such courses. One suggestion is to provide an age-appropriate theme for investigation over the course of a school year, in which various of the Human Development goals and components can have flexible parts, depending on teachers' and students' strengths and interests, and on the issues that arise. One such theme is the study of comparative religions. Postman (1996) went into some detail describing how such a course could be taught. He described it as a seminal part of cultural understanding, providing a forum for considering the most essential questions of life, and illustrating the diversity and the commonality of all people over time. A related but separate area might be the study of ethology, considering morality, kindness, and other "human" emotions and behaviors in animals, as this informs our understanding of human social/emotional development (e.g., De Waal, 1996).

Another possible content theme is museum study, described in some detail by Gardner (1991), and Postman (1996). In a year spent on museum study, students could engage themselves with an interdisciplinary exploration of what it is that people value. Postman proposed a course targetting community museums, asking students to consider what various museums (small and large) are trying to say as well as how they are choosing to say it. Students would then be asked to write a prospectus for a new museum in their community, identifying what they would want to communicate to visitors, and how they would go about doing that. Done collaboratively along lines suggested by Bereiter and Scardamalia (1993), Bruner (1996), and Keating (1995), the exploration could provide a lively experience and demonstration of "the great story of human diversity" (Postman, 1996, p. 166).

A fourth and final suggestion for an organizing theme around which a Human Development curriculum might be taught can be found in the idea of cultural journalism, described in considerable depth by Bogdan and Biklen (1992). This is a qualitative research method focussed on describing and analyzing complex experiences, and that can be used by students to investigate their own schools or communities. It facilitates observational skills, reflectivity, self-consciousness, and an awareness of possibilities for change. Cultural journalism requires and facilitates the development of empathy, depending as it does on making a concerted effort to understand others' points of view. It provides students with an opportunity to explore the complex environment of schools, encouraging them to become more aware of their own values, and how these values influence others. Students can become engaged in the problem-driven learning of diverse kinds of skills that are required in many academic and professional pursuits, including learning how to observe, to interview, to use technology, to take notes, and to gather life stories, in addition to acquiring further skills relating to teamwork, writing, layout, and joint decision-making. Additional benefits described by Bogdan and Biklen (1992) include (depending on the topic areas chosen for investigation) preserving knowledge that is otherwise gone, connecting with one's own heritage and culture, strengthening intergenerational ties, and reducing alienation. Human Development Course: The Process

The content of a Human Development curriculum may be less important than how social/emotional lessons are taught. Some of the important process concepts include community involvement (Gardner, 1991; Goleman, 1995; Keating, 1995); coordination with home (Goleman, 1995); respect for diversity (Postman, 1996); and inclusion of students' experiences beyond the classroom (Damasio, 1994, Hurrelmann, 1996; Postman, 1996).

One of the most important process issues of a Human Development course with a chance to make the kind of difference needed, is the incorporation of an integrated developmental approach to social/emotional learning. This involves comprehensive, long-term, systematic curriculum planning, where concepts are constructed one idea at a time, coming together over time to form complex and meaningful understandings that can provide students with the solid foundation of self-understanding that is required for wise decision-making. This is analogous to the kind of thoughtful curriculum planning that goes into linguistic and mathematical development, whereby students work to acquire basic skills in the early grades, and then branch out into various age-appropriate explorations, using the foundation of learning that they have already established.

It can be argued that social/emotional learning happens best when seen as a part of all other learning, that it should not be separated out into its own school course. This argument has considerable merit and many strong supporting tenets in its favour. However, when social/emotional learning is not given its own explicit focus as suggested here in the form of a Human Development course, it tends to be left to chance and is frequently relegated to the burgeoning bin of non-essential extras with which teachers are burdened, and which are experienced as distracting from the serious subject-area work of schooling. The result in this commonly-experienced situation is that those students who have the best out-of-school support are the ones who have the best opportunities to learn what they need to know in this very important area. It might be expected that this chance factor, closely tied to social privilege and maintenance of the status quo, is a big determinant in career opportunities and achievement.

Goleman (1995) observed that social/emotional domain courses, to be effective, must be offered regularly and over a sustained period of years, because emotional learning works by the repetitive experiencing of situations and ideas, which are stored in the brain as strengthened connecting pathways; these act as neural habits that are then available in times of duress, frustration, and hurt. The emphasis on sustained learning opportunities, proceeding systematically over time, with an experiential focus that connects into students' lives outside the classroom, is more important for emotional learning than other kinds of learning because of the amygdala's function as the brain's automatic default mechanism that is activated in times of stress and that can preclude thoughtful responses: the only way to override the bad emotional habits that are formed in the absence of consistent emotional teaching is to learn, experience, and practice more reflective habits of mind.

Citing research findings across many disciplines, Keating (1995) argued that learning collaboratively while working on meaningful tasks constitutes the best possible learning environment, and that individual and organizational learning is enhanced by diversity: when a broader, more diverse array of tasks and challenges is encountered, cognitive complexity and problem-solving improve, as does flexibility. These pedagogical concepts are particularly salient

for gifted secondary school students. They can be applied across all subjects in the school curriculum, and that would find a natural home in a Human Development course. Such a course might provide an experimental framework in which these concepts could be explored and practiced, and in which students and teachers would discover how to apply them to other subject areas. *Challenging Gifted Adolescents in the Social/Emotional Domain*

While it has been argued by many of the authors cited here that all students require opportunities for systematic engagement in social/emotional learning, many gifted adolescent learners have a particular need for such opportunities. Adolescent girls are much likelier than their male peers to find salience in the social/emotional domain; if we want to encourage gifted girls to remain engaged in learning, we might be well advised to provide, along with girl-friendly math and science classes, opportunities to become engaged in investigations of social/emotional questions and concerns. For members of many minority cultures, the social/emotional domain is an area of vital interest and ability that might be predicted to yield gifted-level outcomes in students who appeared otherwise closer to average. Finally, there are students who do not fit into either of these socially disadvantaged categories, and whose giftedness is focussed on social/emotional pursuits, an example of which is compellingly described in Chaim Potok's *The Chosen* (1970), where the main character was intensely motivated at a young age to understand the human condition, to the extent that he independently searched out and studied Freud's writing. Such a gifted learner, given the structure provided as suggested here, would be able to follow his intellectual passion with the discipline, discourse, and guidance that is conducive to high level learning outcomes (Csikszentmihalyi et al., 1997/1993; Vygotsky, 1978/1930).

The social/emotional domain constitutes unlimited possibilities for learning, the kind of high- or even no-ceiling situation that gifted adolescent learners require, and incorporating a range of possible learning options limited only by one's imagination. It provides myriad possibilities for engagement in personally-relevant, socially important questions that can best be addressed collaboratively, and that are most eagerly attacked by gifted learners. A good entry point for a teacher wishing to begin work toward implementation of a Human Development course for gifted high school students is an Independent Study option, whereby students are given some guidance in designing projects that address the concerns discussed here, as appropriate to the grade level and subject area. Topics to be explored that (1) incorporate the principles described here as consistent with learning in the social/emotional domain; (2) are flexible enough to allow the scope needed by gifted adolescent learners; and (3) are general enough to be attached to a variety of existing course structures might include the following:

- Career exploration; traditional and unconventional possibilities; job shadowing; interviews with practitioners; exploring how people become interested in what they end up doing in their lives, and how career interests are supported and destroyed
- Comparative religions (Postman, 1996); different ways that people systematize their beliefs; commonalities across cultures; changes over time
- Conflict resolution; mediation skills; the art of listening
- Criminality; social factors involved in deviance, and environmental supports that work toward crime prevention
- Cultural journalism; an exploration of one's own and others' cultural roots (e.g., Bogdan & Biklen, 1992)

- Emotion and cognition; how feeling and thinking are interconnected neurologically and practically (e.g., Damasio, 1994); identifying and dealing with one's own moods (e.g., Goleman, 1995)
- Ethology; morality, kindness, and other "human" emotions and behaviors in animals, as this informs our understanding of human social/emotional development (e.g., De Waal, 1996)
- Flow; using one's emotions to enhance learning and performing at one's peak of ability; the pleasure that comes from full engagement in personally meaningful and challenging tasks (Csikszentmihalyi, 1993; Csikszentmihalyi et al., 1997/1993)
- Leadership and popularity, considered in various fields, including politics, business, science, education, the arts, social life; the dynamics of power
- Media values; sex, race, and age stereotypes; cultural mores portrayed, e.g., violence, sexuality
- Museum study; what it is that people value, and why (Gardner, 1991; Postman, 1996)
- Peer pressure and group dynamics; the importance of social support; productive and destructive uses of it; making and keeping friends
- Sexuality; changes in attitudes over time and across cultures; influences on young people's activities, dangers involved in various kinds of activity; biological, emotional, and psychological reasons for engagement
- Stress and coping skills; relaxation techniques; methods of dealing with frustration

Although the Independent Study approach might be seen as similar to what has been described above as the patchwork currently in place, it can also be viewed as a first step toward a more systematic and principled organization of learning in the social/emotional domain, by creating a structure in which such learning is respected as worthy of serious academic interest. After establishing a track record of meaningful learning, an interested educator or team of educators could then look for colleagues with whom to collaborate, both across grade levels and across subject areas, such that, over time, gifted learners at a given school were helped to develop principled understandings of their own functioning, as well as social dynamics. If taken to the next level, this could be pulled together into a systematic and coherent course of study, similar to that that is being called Human Development here. If administrators and other educational decision-makers were brought into planning and consideration processes along the way, this would strengthen and extend changes made in this direction.

Conclusion

High school educators who work toward providing courses in social/emotional learning as described here can be instrumental in ensuring that several important educational and social purposes are served. For gifted learners, there is an increased likelihood that diversely gifted students, particularly including girls and some minority group members, will find meaning in their academic studies, and thus stay engaged in their school-based intellectual development, which in turn enhances their chances for high-level career achievement. This would have many obvious individual and social benefits, as diverse members of society explored and developed ways to use their abilities at higher levels. Students who were gifted in other areas, including the more traditional academic domains, would be provided with a high-ceiling domain in which they could become engaged in flow experiences without fear of reaching the limit of their being

challenged, thus finding a way to stay engaged by at least some aspects of schoolwork until they were finished high school. Such learning activities, to be effective, would incorporate the principles discussed above as described by Keating (1995), of providing opportunities for learning collaboratively while working on a broad, diverse array of meaningful tasks and challenges. A nontrivial secondary benefit of implementing a Human Development course, or even opportunities for independent study in this area, for gifted high school students is that as educators, students, and parents not involved in gifted education observed the benefits of such learning activities, implementation might well begin for other students, resulting in educational experiences for all students in this essential and problematic domain of functioning, enhancing the likelihood of widespread more thoughtful participation in personal, cultural, and political life at a time when this is much needed. Students who had previously had little or no opportunity to consider issues in this domain could be helped to understand their own functioning and that of others, learning how to make more considered decisions, and increasing their chances for making good, personally- and socially-productive decisions. One way to address some important current problems - the underrepresentation of females and minorities in gifted-level career achievement; widespread social disintegration; challenges to thrive in an era of rapidly increasing societal change - is to focus on social/emotional development as a domain that requires proactive educational intervention. When secondary schools help gifted students to understand their own development and the diversity of possible social environments they might choose or create, they enhance the likelihood of their students becoming better decision-makers for themselves and wiser leaders as adults, and increase the chances of diversely gifted adolescents becoming gifted adults.

References

- Arnold, K. D. (1995). *Lives of promise: What becomes of high school valedictorians*. San Francisco: Jossey-Bass.
- Bailey, S. M. (1993). The current status of gender equity research in American schools. *Educational Psychologist*, 28 (4), 321-339.
- Bergen, D. J., & Williams, J. E. (1991). Sex stereotypes in the United States revisited: 1972-1988. *Sex Roles*, 24, 7/8, 413-423.
- Bereiter, C., & Scardamalia, M. (1993). *Surpassing ourselves: An inquiry into the nature and implications of expertise*. Chicago: Open Court.
- Bogdan, R. C., & Biklen, S. K. (1992). *Qualitative Research for Education: An introduction to theory and methods* (2nd ed.). Boston: Allyn & Bacon.
- Bolognini, M, Plancherel, B., Bettschart, W., & Halfon, O. (1996). Self-esteem and mental health in early adolescence: Development and gender differences. *Journal of Adolescence*, 19, 233-245.
- Bruner, J. (1996). *The culture of education*. Cambridge, MS: Harvard Press.

Cauce, A. M., Mason, C., Gonzales, N., Hiraga, Y., & Liu, G. (1996). Social support during adolescence: Methodological and theoretical considerations. In K. Hurrelmann & S. F. Hamilton, Eds., *Social problems and social contexts in adolescence: Perspectives across boundaries* (pp. 131-151). New York: Aldine de Gruyter.

Csikszentmihalyi, M. (1993). *The evolving self: A psychology for the third millennium*. New York: Harper Collins.

Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1997). *Talented teenagers*. Cambridge, GB: Cambridge University Press. (originally published, 1993)

Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: Grosset, Putnam.

De Waal, F. (1996). *Good-natured: The origins of right and wrong in humans and other animals*. Cambridge, Massachusetts: Harvard University Press.

Dinnerstein, D. (1976). *The mermaid and the minotaur: Sexual arrangements and human malaise*. New York: Harper & Row.

Egan, K. (1997). *The educated mind: How cognitive tools shape our understanding*. Chicago: University of Chicago Press.

Farmer, H. S. (1987). A multivariate model for explaining gender differences in career and achievement motivation. *Educational Researcher*, 6 (2), 5-9.

Farrell, D. M. (1989). Suicide among gifted students. *Roeper Review*, 11, , 134-138.

Feldman, D. H., with Goldsmith, L. T. (1986). *Nature's gambit: Child prodigies and the development of human potential*. New York: Basic Books.

Feldhusen, J. F. (1992). Early admission and grade advancement for young gifted learners. *GCT*, March/April, 45-49.

Ford, D. Y., Grantham, T. C., & Harris, J. J. (1996). Multicultural gifted education: A wakeup call to the profession. *Roeper Review*, 19, 72-78.

Gardner, H. (1983). *Frames of mind*. New York: Basic Books.

Gardner, H. (1991). *The unschooled mind: How children think and how schools should teach*. New York: Basic Books.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.

Gilligan, C., Lyons, N., & Hanmer, T. (Eds.). (1990). *Making connections: The relational worlds of adolescent girls at Emma Willard School*. Cambridge: Harvard University Press.

Goleman, D. (1995). *Emotional intelligence*. New York: Bantam.

Gottlieb, B. H., & Sylvestre, J. C. (1996). Social support in the relationships between older adolescents and adults. In K. Hurrelmann & S. F. Hamilton, Eds., *Social problems and social contexts in adolescence: Perspectives across boundaries* (pp. 153-173). New York: Aldine de Gruyter.

Hurrelmann, K., & Hamilton, S. F. (Eds.) (1996). Social problems and social Hurrelmann, K. (1996). The social world of adolescents: A sociological perspective. In K. Hurrelmann & S. F. Hamilton, Eds., *Social problems and social contexts in adolescence: Perspectives across boundaries* (pp. 39-62). New York: Aldine de Gruyter.

Keating, D. P. (1995). Changing maps: Governing in a world of rapid change. In S. A. Rosell (Ed.), *The second report of the Project on Governing in an Information Society*. Ottawa: Carleton University Press in collaboration with the Meridian International Institute and the Parliamentary Centre.

Keating, D. P. & Matthews, D. J. (March, 1990). High level competence: Domain-specific or general? Poster presented at the *Society for Research on Adolescence*. Atlanta.

Matthews, D. J. (1993). Linguistic giftedness in the context of domain-specific development. *Exceptionality Education Canada*, 3 (3), 1-23.

Matthews, D. J. (1996). Giftedness at adolescence: Diverse educational options required. *Exceptionality Education Canada*, 6, 3 & 4, 25-49.

Matthews, D. J. (1997). Diversity in domains of development: Research findings and their implications for gifted identification and programming. *Roeper Review*, 19, 172-177.

Matthews, D. J., & Keating, D. P. (1995). Domain specificity and habits of mind: An investigation of patterns of high-level development. *Journal of Early Adolescence*, 15, 319-343.

Matthews, D. J. & Smyth, E. M. (1997). Encouraging bright girls to keep shining. *Orbit*, 28, 34-36.

Moore, B. (1966). *I am Mary Dunne*. Toronto: McClelland & Stewart.

Petersen, A. C., Silbereisen, R. K., & Sörensen, S. (1996). Adolescent development: A global perspective. In K. Hurrelmann & S. F. Hamilton, Eds., *Social problems and social contexts in adolescence: Perspectives across boundaries* (pp. 3-37). New York: Aldine de Gruyter.

Pipher, M. (1994). *Reviving Ophelia: Saving the selves of adolescent girls*. New York: Ballantine.

Pollard, D. S. (1993). Gender, achievement, and African-American students' perceptions of their school experience. *Educational Psychologist*, 28, 341-356.

Postman, N. (1996). *The end of education: Redefining the value of school*. New York: Vintage Books.

Potok, Chaim. (1970). *The chosen*. Greenwich, CT: Fawcett.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9, 185-211.

Salovey, P., & Sluyter, D. J. (Eds.) (1997). *Emotional development and emotional intelligence: Educational implications*. New York: Basic Books.

Shade, B. J. (1994). Understanding the African American learner. In E. R. Hollins, J.E. King, & W. C. Hayman (Eds.), *Teaching diverse populations: Formulating a knowledge base* (pp. 175-189). New York: State University of New York Press.

VanTassel-Baska, J., Olszewski-Kubilius, P., & Kulieke, M. (1994). A study of self-concept and social support in advantaged and disadvantaged seventh and eighth grade gifted students. *Roeper Review*, 16, 186-191.

Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press. (Original work published 1930).

Wellesley College Center for Research on Women. (1992). *How schools shortchange girls*. Washington, DC: American Association of University Women Educational Foundation.

Wright, R. (1940). *Native son*. New York: Harper.