Alicia entered class on the first day of her last year in school, frustrated, alone, and carrying a chip on her shoulder the size of Half Dome. Her angry countenance betrayed her true passion in life: writing. If her teacher had based her impressions of Alicia on that first encounter with the baggy-panted, scowling, "gang member wanna-be," she would have given up completely on the idea that this young woman could be educated.

As Alicia's writing proclivity emerged over the course of several weeks, the teacher encouraged and commended Alicia on her achievement. Alicia's stare and her achievement brightened as the end of the semester approached. She finally reciprocated the teacher's caring and concern. By the end of the first semester, Alicia had earned an A in her social studies class after intimating that she had almost "flunked out" of U.S. history the year before.

During the second semester, Alicia was visiting the teacher and bringing her small tokens of appreciation. As graduation approached, Alicia visited her teacher daily and wrote her an articulate and loving tribute as a graduation present. The teacher's encouragement of Alicia's writing talents had not gone unnoticed. On graduation night, as the newly freed graduates embraced family and friends, Alicia found her social studies teacher to say "good-bye" and to thank her for her love and encouragement. The teacher made Alicia promise that she would attend the community college and take as many writing courses as possible; she made Alicia promise not to neglect her gift or herself.

What was it that enabled Alicia to succeed, after overcoming tremendous odds, when so many others fail?

## PROBLEMS FACED BY TALENTED TEENS

Researchers (Buescher, 1985; Csikszentmihalyi, Rathmunde, & Whalen, 1997; Galbraith & Delisle, 1996; Peterson, 1993; Rimm, 1986; Silverman, 1990; Webb, 1994) have identified the types of problems faced by talented teenagers, including family and peer relations, biological and developmental issues, negative and harmful school culture, drug and alcohol abuse, sexual promiscuity, inappropriate academic curriculum, underachievement, perfectionism, and stress. While not all of these problems are attributable to the educational environment, school personnel can go a long way toward alleviating some of these pressures.

### FAMILY AND PEER RELATIONS

Maslow (1970) wrote of the hierarchy of needs that must be met before students can truly develop their potential. Maslow identified the physical and physiological needs for health and safety as the most immediate and crucial steps on his hierarchy. The family structure of the 1990s bears little resemblance to families of the 1950s. Some students arrive at school having no roof over their heads nor food in their stomachs. When a student lives in a car, it's difficult to ask for mathematics homework. Teens may face the dual fear of physical or emotional abuse. If these most basic needs cannot be met, it's difficult for students to look beyond their physical existence.

The third stage of Maslow's hierarchy is the need for a sense of belongingness and love. Talented teens have the capacity for heightened sensitivity and are susceptible to feelings of rejection by parents and peers and fears of "not belonging" due to their differential intellectual capacity (Coleman, 1996).

The fourth stage of Maslow's hierarchy is the need for self-esteem. Cross (1997) suggested that "parents, counselors and teachers must make regular assessments of where on the hierarchy gifted students are" (p. 183). He continued that because researchers in gifted education focus their efforts on identifying and nurturing those students capable of manifesting extraordinary levels of performance, respecting the relationship between the most basic to the most advanced drive states as motivating human behavior is a natural fit. (p. 183)

Bright students are aware of the artificiality of some self-esteem activities. The most important thing a classroom teacher can do for a talented adolescent is provide a challenging and stimulating curriculum while providing the scaffolding for students to succeed. Self-esteem is the natural outgrowth of such an environment. Teachers and other school officials must take care that they are aware of and empathic towards students' progress along the hierarchy. In the 1990s, as more and more responsibility for the care and nurturance of students belongs to the schools, counselors and teachers must take responsibility for the care and feeding, not simply the reading and writing, of their wards.
DEVELOPMENTAL NEEDS

In addition to the family and peer issues faced by talented teens, there are also biological and developmental changes that are occurring. Many bright teens exhibit what Dabrowski (1938) named "overexcitabilities." Piechowski (1979) proposed that Dabrowski's model "defines five parallel ... modes of mental functioning assumed to be genetically independent," the strength of which "is taken to be a measure of the person's developmental potential, hence, also of the person's giftedness" (Piechowski, 1979). Dabrowski described "an expanded and intensified manner of experiencing in the psychomotor, sensual, intellectual, imaginative, and emotional areas" (Piechowski & Colangelo, 1984). These include psychomotor overexcitability, which manifests itself as a "love of movement for its own sake--rapid speech, pursuit of intense physical activity, impulsivity restlessness ... and the capacity for being active and energetic" (p. 81). Anyone who has taught talented teens knows that they talk faster, move faster, and seem to be more impulsive in thought and speech. Unfortunately, this sometimes manifests itself in inappropriate classroom behavior. A teacher can harness the excess energy by providing a mixture of classroom activities that address different learning styles, interests, and cognitive abilities.

A second overexcitability is sensual, "expressed in the heightened experience of sensual pleasure" (Piechowski & Colangelo, 1984, p. 82). When the developmental and sexual pressures of adolescence meet the "sensual overexcitability" of the gifted, an explosion of epic proportions is certain to occur. It is imperative that these feelings are dealt with by parents and counselors, especially in light of several studies (Csikszentmihalyi, Rathunde, & Whalen, 1997; Reis, Hebert, Diaz, Maxfield, & Ratley, 1995) that demonstrate that students who are able to sublimate sexual tension and put off serious relationships have a better chance of achieving to their highest potential.

A third overexcitability is intellectual, which is associated with an intensified activity of the mind. Its strongest expressions--persistence in asking probing questions, avidity for knowledge and analysis, preoccupation with logic, and theoretical problems--have more to do with striving for understanding and truth than with academic learning and achievement. (Piechowski & Colangelo, 1984, p. 82)

To enhance the intellectual excitability of these students, modifications should be made in their high school academic environment. Talented teens need the association of the intellectual peers they encounter in Honors and Advanced Placement courses. Their intellectual flame is fanned with the stimulating interaction of a Socratic discussion in an Advanced Placement U.S. history course. Students also need stimulating curriculum that is relevant and tied to the structure of the disciplines (Bruner, 1960; Phenix, 1964; Renzulli, 1988; Van Tassel-Baska, 1994). Allowing students to investigate the natural interdisciplinary and controversial aspects of cloning would be one way to address a need for stimulating curriculum that is tied to study of the disciplines. A third major component would be the addition of extracurricular competitions, such as Odyssey of the Mind, Math Olympics, Academic Decathlon, and Future Problem Solving. Students earn the dual benefits of rigor and challenge in their curriculum and the association with other talented teens who share the same interests and heightened intellectual precocities.

Another of Dabrowski's modes is "imaginational overexcitability," which "is recognized through rich association of images and impressions, inventiveness, vivid and often animated visualization, use of image and metaphor in speaking and writing" (Piechowski & Colangelo, 1984, p. 82). Teachers are often baffled and surprised at the talented teens' rich use of images and metaphor in writing and speaking. They often appreciate the outrageous in art and music due to their peculiar aesthetic associations. One way to address this insight is to use techniques of creativity such as Synectics, Creative Problem Solving, and the use of metaphor and imagery in expression styles (Starko, 1995).

The last of Dabrowski's modes is "emotional overexcitability," which "is recognized in the way emotional relationships are experienced, in strong attachments to persons, living things or places, and in the great intensity of feeling" (Piechowski & Colangelo, 1984, p. 82). Talented teens have strong emotional and political ties and will argue to the death an issue of right or wrong. It is the teacher's role to light the flame of passion when necessary and douse it when it threatens the students' well-being.

NEGATIVE AND HARMFUL SCHOOL CULTURE

Violence in schools is on the rise. One peek at the headlines in any urban newspaper in America will confirm this. The Los Angeles Times reported on April 13, 1998, that

levels of violence and drug availability in U.S. schools rose slightly from 1989 to 1995.... In 1995, 14.6% of students ages 12-19 reported violence against people or property at school ... 4.2% of students in that age group experienced a violent crime. ("Slight rise in drugs," 1998)

Talented teens who demonstrate heightened social and emotional sensitivity will be even more affected by these trends than the typical teen in high school today. According to a National Research on the Gifted and Talented study (Reis, Hebert, Diaz, Maxfield, & Ratley, 1995), some students who demonstrate "resilience" attribute it to the peer relations gained when they are enrolled in Honors and Advanced Placement courses with other students like
themselves. When the pressures include drugs, alcohol, tobacco, and sex, the safe haven becomes critically important. Students involved in Honors or Advanced Placement courses (or extracurricular activities) have a built-in "excuse" for not becoming involved in these activities: Their continued participation is predicated upon their staying out of trouble. A few impromptu "brown bag" lunches can also prove therapeutic for teens trying to find their way. Students attempting to overcome the stifling effects of peer pressure learn how to say "no" and still be accepted by their academic peers.

CURRICULUM AND MOTIVATION

Vygotsky (1962) described a "Zone of Proximal Development," or the gap between what learners are able to do by themselves and what they could do with a teacher's assistance, referred to as "scaffolding." It is within this gap that most learning occurs. Most curriculum today is created with the mixed-ability, heterogeneous class in mind. Vygotsky's Zone of Proximal Development is appropriate for only a few of the less-ready students in the class. Able students learn early in their educational lives that they can often get by with their own talents, and, consequently, they never learn to study, fail, and persevere. By the time they reach high school, with geometry, physics, and calculus, they have neither the skills nor the motivation to achieve at their previous levels. Underachievement that may have begun in grade 4 is now full-fledged despair, and the specter of dropping out, emotionally or physically, is now realized.

In addition to the lack of rigor and challenge that talented teens face, there is often a lack of congruence between a student's chosen field and his or her passion areas. This mismatch occurs when talented teenagers are tossed between the passion of their talent areas and the reality of their economic futures. Csikszentmihalyi, Rathmunde, and Whalen (1997) found that talented teens often have misperceptions of the role of the arts and hard sciences in their futures. The researchers proposed the need to strike a balance between "integration and differentiation" in their educational experiences (p. 121). Integration is illustrated by stability and constancy, while differentiation is associated with change (p. 13). The "optimal system" is one that is complex, combining the cohesiveness and stability of integration with the ability to adapt and change of differentiation. A classroom teacher provides a safe, consistent environment where students are aware of the expectations and able to meet them. Examples include providing students with concise rules and consequences, rubrics for writing and projects, and clear guidelines for grades.

Differentiation occurs when the teacher is able to see the need for change, variety, and new energy; when he or she is able to seize the "teachable moment" and run with it. Integration and differentiation may also be applied to school subjects. According to Csikszentmihalyi, students perceive that math and science courses are useful, sequential and constant, but not especially interesting. On the other hand, the constant swirl of activity and flux that characterizes courses in the arts stimulates students' interests but is tempered by the reality of the economic underachievement of the artist. How, then, can teachers help students see the passion in the hard sciences and the utility of the arts? How can the integration of the hard sciences and the differentiation of the arts combine to enhance the motivation of students for all these subject areas? The answer, according to Csikszentmihalyi, lies in the blending of what Amabile (1983) referred to as "intrinsic and extrinsic motivation."

Hennessey and Amabile (1986) described "the intrinsic motivation principle of creativity: People will be most creative when they feel motivated primarily by the interest, enjoyment, satisfaction, and challenge of the work itself—not by external pressures" (p. 11). Csikszentmihalyi, Rathmunde, and Whalen (1997) noted that schools are famous for encouraging extrinsic motivation in students through rewards of free time, video day, and, the ultimate extrinsic reward, grades. They are more critical of educators' ability to develop and nurture intrinsic rewards of the type that encourage real creative productivity. He suggested that educators must find a way to inspire "flow" in students, which is "subjective state that people report when they are completely involved in something to the point of losing track of time and of being unaware of fatigue and of everything else but the activity itself" (p. 14). The talented teens in his longitudinal study suggest that "flow" was one aspect of their enjoyment of their passion area, most notably in music, art and athletics. Csikszentmihalyi suggested that educators must inspire that same passion in teens for the academic areas, as well. How can educators create an environment that encourages intrinsic motivation while allowing "flow" to occur?

A TEACHER’S ROLE

According to Csikszentmihalyi, Rathmunde, and Whalen (1997), there are three areas in which teachers may have an impact on the lives of talented teens. First, teachers can serve as role models, both morally and professionally. Students are enthralled by stories of teacher travel and inspired by reports of courses taken or creative performance risked. High school students in rural areas are especially susceptible to rigid ideas about the world around them. Were it not for athletic or artistic bus excursions, some would never find their way outside their immediate communities. Teachers expose students to the world by allowing them to travel, vicariously, to places far and near. Students are "hooked" into studying history, mathematics, or economics with a few well-placed fables of the earthquakes of California, the mountains of Austria, or the currency-changing horrors of Italy and Japan. They stand in awe of a teacher who can work all day, coach a team or an academic competition in the afternoon and attend classes in the evening. They are surprised and proud when their teacher leaves his or her comfort zone and performs in a community theater production, concert, or art exhibit. Finally, they appreciate and admire a teacher who demonstrates caring and
who is not afraid to take the moral high ground; who is not afraid to help them see right and wrong. He or she doesn't need to press his or her views, but only point out that others exist. There are no more important lessons that adolescents can learn than these.

Teachers can also influence motivation by "pacing the match between challenges and skills" (Csikszentmihalyi, Rathmunde, & Whalen, 1997, p. 185). Students fondly recall the teacher who seems to have a passion for his or her subject matter. Sometimes they tease and joke about that passion, but they always appreciate it. Too often, students sit in high school classrooms where the teacher seems as bored as the students. Boredom can have an epidemic-like effect on students; but, fortunately, so can excitement and passion. Students who have no use for the Pythagorean Theorem can suddenly be transformed into the exhilarating world of Euclidean geometry by the right mix of content knowledge and passion. In these days of large class sizes and departmentalized instruction, a few caring and passionate moments with an interesting teacher can carry a talented teen a long way.

A third "characteristic that distinguishes memorable teachers is their unusual ability to perceive the emerging needs of often insecure young people" (Csikszentmihalyi, Rathmunde, & Whalen, 1997, p. 188). The usually cheerful, happy, high school senior who suddenly appears sullen or bored may be screaming silently at someone for help. The gregarious, talented student-athlete who suddenly gives up soccer is reaching out. Teachers must transcend the perception that their job is simply to teach content; their job is also to teach students. If that means spending an entire day talking about race relations because half the class can't believe the O. J. Simpson verdict, then so be it. Teaching is all about awareness and sensitivity--awareness of those "teachable moments" that may not appear in the lesson plan, or the sensitivity to the collective angst of the student body when a classmate has been killed in a drunk driving accident.

**SOURCES OF STRESS**

Other issues, such as perfectionism, multipotentiality, and underachievement, can be extreme sources of stress in the lives of talented teens. Adderholdt-Elliott (1989) defined perfectionism as a series of characteristics that include procrastination, poor time management skills, difficulty in social situations, fear of failure, or fear of success; "an all-or-nothing mind-set, paralyzed perfectionism and workaholism (which leads to burnout, depression, and a lost balance among school, family, and friends)." Perfectionism in elementary school often leads to underachievement in high school (Hostettler, 1989). Teachers can help overcome the deleterious effects of perfectionism by hosting goal-setting sessions to help students learn how to set reasonable goals; teaching effective time management strategies that show students how to reapporion their time into manageable chunks; teaching teens strategies to help them learn to say "no"; and creating support systems so students can learn to deal with stress and reward themselves for successes along the way (Adderholdt-Elliott, 1987; Galbraith & Delisle, 1996; Peterson, 1993).

Multipotentiality is "an embarrassment of riches" for talented teens (Galbraith & Delisle, 1996, p. 96). According to Webb (1994), "gifted children often have several advanced capabilities and may be involved in diverse activities to an almost frantic degree. Though seldom a problem for the child, this may create problems for the family, as well as quandaries when decisions must be made about career selection." Multipotentiality will be a boon for some and a bane for others. Talented teens who love acting, argument, and advocacy find themselves in conflict with parents who require mathematics, measurement, and medicine. The teacher can assist the multi-potentialized teen by providing opportunities to explore different talent areas (Gardner, 1983; Renzulli & Reis, 1997; Sternberg, 1997), establishing an encouraging and realistic atmosphere and learning environment, allowing students to specialize in their talent area; training students in decision-making strategies and providing opportunities to meet adult mentors and role models (Betts, 1986; Renzulli, 1978).

Davis and Rimm (1994) defined underachievement as "a discrepancy between the child's school performance and some index of his or her actual ability, such as intelligence, achievement, or creativity scores, or observational data" (p. 281). Issues related to underachievement have been documented extensively (Buescher, 1991; Clark, 1997; Colangelo & Davis, 1991; Diaz, 1998; Reis, 1998; Rimm, 1986, 1995; Seeley, 1989; Silverman, 1993). The usual suspects are the schools (i.e., negative school climate, inflexible classrooms and schedules, competitive classrooms, negative expectations, an unrewarding curriculum) (Davis & Rimm, 1994) and too much emphasis on extrinsic rewards (Amabile, 1983; Csikszentmihalyi, Rathmunde, & Whalen, 1997). Today, teachers wear many hats and juggle many tasks, but a simple recognition that a student is in trouble can have a profound, enduring effect on that student's life. Reis, Hebert, Diaz, Maxfield, and Ratley (1995) found that a single parent or teacher was often responsible for reversing the underachievement of talented teens. A panel of students who participated in a study on underachievement by the National Research Center on the Gifted and Talented suggested that if they could impart one piece of wisdom to teachers, it would be "let students know you care about them." By simply saying, "hello," asking how her day was going, and encouraging her to continue improving, Alicia's teacher was able to help reverse her underachievement of the previous year. Don't try to save the world all at once; take it one talented teen at a time.

These problems cannot be overcome in one year or by one teacher. They've taken a lifetime to spawn and will take a lifetime to stifle. But parents, counselors, and teachers have a crucial role to play in guiding talented teens through these difficult and emotional years. Then, once in a career, a student like Alicia will come along and teach the teacher the lesson of a lifetime.
A TEACHER’S ROLE

* Be aware of a student’s place on Maslow’s ladder.
* Assign work that is meaningful to all students.
* Allow students to work in their passion areas part of the time.
* Keep open lines of communication with guidance counselors and parents.
* Use "hooks" and representative topics to engage students in the learning process.
* Expose students to controversial, value-laden scenarios.
* Encourage bright students to enroll in Honors and Advanced Placement courses.
* Encourage competitive students to engage in speech competitions, Academic Decathlon, Odyssey of the Mind, Math Olympics, and science competitions.
* Provide opportunities for mentorships.
* Encourage "brown bag" lunch meetings to explore feelings and emotions characteristic of high ability students.
* Encourage students to seek careers in their passion areas.
* Help students explore different pathways to careers (e.g., graphic arts, musical therapy, etc.).
* Use different teaching activities to enhance Csikszentmihalyi’s idea of "differentiation."
* Look for topics that inspire "flow."
* Share your experiences, triumphs, and failures with students.
* Demonstrate your passion for your content.
* Provide a safe, consistent environment.
* Be attune to "teachable moments" that can activate student attention.

ADDED MATERIAL

REFERENCES


http://vnweb.hwwilsonweb.com.ezproxy.lib.ucalgary.ca/hww/re...