

Underachievement and Creativity: Are Gifted Underachievers Highly Creative?

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This literature review synthesizes the available literature that suggests that the underachievement of gifted students may be tied to their inherent and unrecognized creativity. Apparently, many gifted students are underachievers and up to 30% of high school dropouts may be highly gifted. Beginning with the belief that these gifted underachievers may be highly creative, this article first reviews the view that creativity can be a gift, much like intelligence. It then reviews the typical characteristics of gifted underachievers and the similar characteristics of creative underachievers. Finally, it reviews the studies and theories that have shown that once underachievers are placed in an environment that fosters their needs, with motivation, mentors, understanding, freedom, and responsibility, they can become highly productive. Classrooms across the nation are facing ever-increasing pressure to educate every child, especially with the *No Child Left Behind* (2007) Act. There is a demand for those children who might normally “fall through the cracks” to receive closer attention and potentially greater accommodations than were previously required.

A 1984 report from the National Commission on Excellence in Education, *A Nation At Risk: The Imperative for Educational Reform*, clearly documented the indicators of poor performance in American schools. The indicators included comparisons with other countries and findings that in the United States, over half of gifted students do not achieve to capacity. There is also declining science achievement, functional illiteracy in 13% of 17-year-old students, declining SAT scores, and a host of other negative indicators (Feldhusen & Hoover, 1984). Underachievement has been a particular problem for gifted boys, and it may affect 50% of the boys of above average ability (Gallagher, 1976). *U.S. News & World Report* has estimated that up to 18% of all high school dropouts are gifted students (Solorzano, 1983). The U.S. Office of Education has estimated that 25–30% of school dropouts are gifted and talented students (Seeley, 1984).

Creativity and intelligence are not mutually exclusive. Therefore, the cause of the underachievement of many

gifted and talented students may be their creativity, which tends to clash with traditional school environments. Many gifted underachievers show potential for high levels of creativity (Whitmore, 1980) and many of the characteristics reported for gifted underachievers are similar to those of highly creative individuals (Lajoie & Shore, 1981). It has been well documented that highly creative students experience difficulty in traditional school environments (Amabile, 1989). Sixty percent of 400 eminent creative individuals studied by Goertzel and Goertzel (1960) had serious school problems. Highly creative students exhibit characteristics that many teachers find undesirable in traditional school environments (Davis & Rimm, 1994; Oliphant, 1986; Rimm & Davis, 1976; Ritchie, 1980; Robinson, 1980; Torrance, 1962).

One classic example of a highly creative and highly gifted individual that did not do well in traditional school environments is Albert Einstein. Einstein hated strictly regimented academics and excelled only with self-study or in nontraditional environments. Einstein's childhood was troubled; early observers suggested that he might be “retarded” because he began speaking much later than the average child and he had a tendency to

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ignore any subject in school that bored him (Wikipedia, 2006). Einstein got generally good grades in his highly traditional Munich high school, but he hated it because success depended on memorization and obedience to arbitrary authority. He caused so much trouble a teacher suggested Einstein leave, because his very presence destroyed other students' respect for authority. At 15, he left Munich and was sent to a new school in Switzerland where his ideas were set free (Amabile, 1979; Hennessey, & Amabile, 1987; Wikipedia, 2006). In college, again a traditional school environment, Einstein attributed his success to his friend, Marcel Grossman, who shared his lecture notes for examinations; Einstein worked in either the library or the laboratory (Wikipedia, 2006). Thus, Einstein's very success depended upon self-study and nontraditional school environments.

Many highly creative students are not as lucky as Einstein. They do not have the freedom, ambition, or ability to maintain self-study programs, and are forced into traditional school environments. If highly creative students are forced into traditional school environments, these individuals may become troublesome to teachers and disruptive in the classroom. They may resent the constraining structure of the classroom, excessive rules and regulations, and the press for the conformity. They may lack the opportunity and encouragement to be creative and self-expressive, which may develop into mental and emotional issues with teachers, peers, and their own self-image. They avoid unpleasant academic tasks and interaction with teachers or peers and can become troublemakers that negatively affect the classroom environment for others. Ultimately, these creative individuals may develop into the gifted underachievers that many studies have identified (e.g., Seeley, 1984).

GIFTEDNESS: INTELLIGENCE AND CREATIVITY

Some of the questions about gifted children and their success arise merely because of the definition of giftedness was formerly one-dimensional, e.g., intelligence. IQ is the most widely used criteria for measuring intelligence, and thus giftedness, because IQ is easily measured with standardized tests and it is a significant predictor of future academic performance.

The problem is that traditional definitions of *giftedness* are not enough, because outstanding success requires creativity (Torrance, 1962). Creativity is important to gifted students' development because it has the power to transform giftedness to eminence (Khatena, 1983). Creativity is important in scientific discovery, invention, and the arts. Striking advances in human affairs—such as in the creative arts, political and military

leadership, and scientific discovery and invention—are mainly due to a few exceptionally creatively gifted individuals (e.g., Weyl, 1970). Achievement is dependent on multiple factors, including the interaction between environmental conditions and the particular manifestation of specific creative characteristics (e.g., Amabile, 1983; Csikszentmihalyi, 1988; Mellou, 1996; Torff, 1999). Many gifted programs, and even countries, are realizing that creativity is an important dimension of giftedness (Georgia Department of Education, 2005; Korean Educational Development Institute, 2003). The most highly creative students—approximately 70% of the top 20% most creative—are eliminated from consideration if schools identify gifted children only on the basis of intelligence tests and scholastic aptitude tests (Torrance, 1960b, 1962). Therefore, although it is outside of the scope of this article, a student who is highly creative should be considered just as gifted as students with a high IQ or outstanding academic performance.

CHARACTERISTICS OF GIFTED UNDERACHIEVERS

Children are complicated, and untangling underachievement in any child, gifted or not, may be like unraveling a knotted ball of yarn—there is no single isolated cause or effect, but a system where each part affects the other.

Gifted underachievers tend to be particularly sensitive to teachers who are critical, rigid, officious, and unsympathetic (Fine, 1967). There are many teachers who have negative attitudes toward gifted students who resist conformity. Teachers who emphasize order, control, and conformity tend to promote more structured and less innovative styles in their students.

Emerick (1992) found that gifted underachievers exhibited independence of thought and judgment, willingness to take risks, perseverance, above-average ability, creative ability, and an intense love for what they were doing.

Gifted students tend to be sensitive to negative social feedback, which contributes to emotional conflict and the development of chronic underachievement (Whitmore, 1980). Rothenberg, Johnson, and Brooks (1966) found that gifted underachievers who had emotional problems had relationship problems with teachers including demanding behavior, excessive attention seeking, hostility, and rebelliousness, and relationship problems with peers including being either intensely competitive or fearful of competition.

Several early researchers suggested that gifted children may be predisposed to emotional instability (e.g., Jung, 1954; Lombroso, 1891), but this suggestion has proven to be unfounded. Oram, Cornell, and Rutemiller (1995) found little relationship between academic

aptitude and psychosocial adjustment among gifted students. Lehman and Erdwins (1981) showed that gifted children scored more positively on measures of social and emotional adjustment. Also, Ludwig and Cullinan (1984) showed that gifted elementary students had fewer behavior problems than their classmates. Ludwig and Cullinan limited their findings by suggesting that students who show poor adjustment are unlikely to be selected for a gifted program, even if they have superior ability and other talents.

Personality inventories comparing male high-ability dropouts and nondropouts (Lajoie & Shore, 1981) showed that male high-ability dropouts were more assertive, independent, rebellious, cheerful, expressive, frank, and talkative than nondropouts. It appeared, therefore, that school pressures for conformity, rather than a lack of interest in school, might create the potential dropout (Lajoie & Shore, 1981). Gender seems to have an effect on underachievement because it affects 50% of the boys of above average ability (Gallagher, 1976), and young men are much more likely to drop out of school than young women (Alspaugh, 2000).

Many characteristics of gifted students can seem to be inattentive behaviors, so there is often confusion in understanding traits that could be related to either creativity, ADHD, or both (Cramond, 1994; Hartnett, Nelson, & Rinn, 2004; Leroux & Levitt-Perlman, 2000; Reis & McCoach, 2002).

The problems and characteristics of gifted underachievers outlined above appear similar to those of highly creative students: They resist conformity; they are not appreciated by teachers; they are extremely independent; they may be estranged from their peers; they may be at risk of emotional problems; they are highly sensitive to negative feedback, etc. Thus, it is not unreasonable to suggest that gifted underachievers may simply be highly creative and their creativity may be leading to all or part of their underachievement.

CREATIVITY IS A CURSE?

As discussed above, creativity can be a gift. However, it is just as true that creativity can be a curse for some students in traditional school environments where it can lead to underachievement. Torrance (Gowan, Khatena, & Torrance, 1979) called highly creative children “creatively handicapped” because their creativity, which might otherwise be an asset, creates a situation that made achievement in most classrooms extremely difficult.

Traditional school environments were established to educate students to certain minimum standards that are now being tested (see, generally, No Child Left Behind, 2007). Further funding limitations may lead to situations where teachers are overloaded by class sizes.

Naturally, teachers seem to gravitate to students that are easier to handle, respectful, not disruptive, follow along in class, accept their teaching unquestioningly, etc. This may lead to rigid classrooms that discourage new and unique ideas and demand obedience, rote memorization, and conformity. Ultimately, this combination can stifle creativity and lead to underachievement of highly creativity individuals.

Teacher's Preferences

Research has shown that teachers are apt to prefer students who are achievers and teacher pleasers, rather than disruptive or unconventional creative students (Davis & Rimm, 1994; Oliphant, 1986; Rimm & Davis, 1976; Ritchie, 1980; Robinson, 1980; Rudowicz, 2003; Rudowicz & Yue, 2000; Scott, 1999; Westby & Dawson, 1995). Scott reported that teachers see creative children as a source of interference and disruption. Westby and Dawson found that teachers' judgment of their favorite students was negatively correlated with creativity. Teachers prefer students to exhibit traits such as unquestioning acceptance of authority, conformity, logical thinking, and responsibility that make students easy to manage in the classroom. Teachers' images of the ideal student emphasize traits that were conformist and socially acceptable (Bachtold, 1974; Kaltsounis, 1977; Kaltsounis & Higdon, 1977; Torrance, 1963).

Many teachers prefer students with a high IQ, rather than students who are both highly creative and highly intelligent (Anderson, 1961). Teachers rate children with high IQs as more desirable, better known, or understood, and more studious than children with high creativity (Torrance, 1962).

A Hong Kong study (Lam, 1996, cited in Rudowicz, 2003) found that teachers' perception of an ideal student did not fit a creative child model. The top-ranked traits for an ideal student were honest, self-disciplined, responsible, and respectful of parents, followed by diligent, unselfish, humble, and obedient. Rudowicz and Yue's study (2000) also found that among college students from Hong Kong, China, and Taiwan, characteristics associated with creativity were considered to be of low importance for a Chinese person. Getzels and Jackson (1958) found that highly creative adolescents are estranged from their teachers and peers. Drews (1961) found that the studious achievers attained the highest teacher grades; the creative intellectuals attained the lowest among three types of gifted high school students: social leaders, studious achievers, and creative intellectuals.

Finally, teachers may even misidentify energetic and unconventional students, a description that fits many highly creative students, as having attention deficit hyperactivity disorder because of teachers' desires for conformity (Cramond, 1994). This disconnection

between teacher's preferences and highly creative children may lead to a discrepancy between classroom expectations and a creative child's educational needs.

Structure and Conformity

Torrance (1962) found that teachers who prefer conformity were frustrated by many characteristics of highly creative students. Highly creative children, especially highly creative boys, have a reputation for having wild or silly ideas (Torrance, 1962). After a child gains a reputation for being silly, it is difficult for teachers and classmates to see good ideas as anything but silly. This is exemplified by a third-grade teacher discovered by Torrance (1960a), who had emphasized conformity to behavioral norms so much that she could not recognize the achievements of a certain highly creative student: This student had learned more than any of her other students.

A teacher's desire for conformity can also drive a student to nonconformity. Whitmore (1980) found that nonconformity can become a drive in highly creative individuals with exceptional mental abilities whose natural thought processes can lead to exploring concepts and methods that diverge greatly from the norm—especially when they are faced with pressure to conform. Torrance and Dauw (1966) found that highly creative high school seniors were high in freedom orientations and low in control orientation, which indicates a lack of conformity among highly creative individuals.

Parental Influences

Just as teachers' attitudes can affect highly creative students, parental attitudes can have an impact on creativity. Getzels and Jackson (1961) interviewed the parents of the two groups: highly gifted and highly creative students. The parents of highly intelligent children focused on immediately-visible qualities such as cleanliness, good manners, and studiousness, yet those of the highly creative children focused on less visible qualities such as the child's openness to experience, his or her values, interests, and enthusiasm. Hudson and Stinnett (1990) also reported a significantly higher relationship between preschool children's creativity test scores and their mothers' report of chaotic or rigid family styles.

Teachers, parents, and peers feel threatened when highly creative students express their creativity. Some of the questioning, experimenting, and wild ideas are annoying. Creative behavior may be interpreted as aggressive or even hostile, and it becomes just that if ideas and questions are rejected. Students who show creative activity consciously ask annoying questions and challenge the status quo, which makes people uncomfortable, and society reacts negatively toward

them (Torrance, 1962). Seeley (1984) was worried that parents and teachers may react by punishing this exploration of alternatives and discouraging the child's abilities.

Torrance (1981b, 2000a, 2000b) noticed that children's creative behaviors are often punished and discouraged by parents and teachers who perceive creative behavior as inconvenient and difficult to manage. This cycle often leads to the child's unwillingness to be creative, and eventually to underachievement and rigid nonadaptive responses in the school environment (Seeley, 1984).

Sensitivity, Risk Taking, and Socialization

Highly creative children face social difficulties due to their unique personality characteristics and needs that may not be experienced by other students. A high degree of sensitivity, a capacity to be disturbed, and divergent thinking are essential traits of the creative personality (Torrance, 1962). Hammer (1961) found that highly creative adolescents exhibited deeper feelings, greater original responsiveness, integration of feminine and masculine components, greater independence and rebelliousness, stronger needs for self-expression, and a fuller range of emotional expression. Getzels and Jackson (1958) showed that degrees of imagination and originality, and especially humor, were much higher in students of high creativity than of high IQ, and that the students of high creativity also enjoyed the risk and uncertainty of the unknown. If a child asks an unusual question or advances a new idea, he or she runs a risk of ridicule by classmates and the teacher (Torrance, 1962). This risk of ridicule may tend to discourage risk-taking, which is important in the acquisition of skills and knowledge (Torrance, 1960a).

Evidence of the anticreativity effects of childhood socialization is found in Torrance's (1967, 1968) *fourth grade slump*, which is a drop in creativity test scores after the third grade. Torrance postulated that the observed drop can be caused by peer pressure and demands for conformity in the classroom. Axtell (1966) found a significant decline of curiosity at the fourth grade among gifted students.

Gender Roles

Gender role expectations may also have an impact on underachievement and creativity. Creative children seem to diverge from sex norms because both sensitivity, which is traditionally a feminine virtue, and independence, which is considered to be a masculine virtue, are essential for creativity (Harrington & Anderson, 1981; Hittner & Daniels, 2002; Norlander, Erixon, & Archer, 2000; Torrance, 1960a, 1962). Some children may sacrifice their creativity in order to maintain their masculinity or their femininity (Torrance, 1960a, 1962),

which can lead to emotional issues and other problems for highly creative students. Teachers who are sensitive to gender issues among their students are in a position to soften the negative impact of sex-role stereotyping.

Suppression of Creativity and Emotional Problems

An entirely different problem may manifest when highly creative children suppress their creativity and become overly conforming and obedient. They are likely to grow up with a lack of confidence in their own thinking and be overly dependent upon others in making decisions. They fail to develop because they have not been provided situations in which it is safe to practice without negative evaluation (Torrance, 1960a). The psychological dangers are severe if creative needs are strong and suppression is severe or prolonged. In such cases, tension is likely to be overwhelming and psychosis may result (Torrance, 1962). The stifling of creativity cuts at the very roots of satisfaction in living and may ultimately create overwhelming tension and breakdown (Patrick, 1955). Kunkel, Chapa, Patterson, and Walling (1995) found that such students experience difficulties with feelings of social stress and estrangement. The power of peer pressure and conformity coupled with a student's wavering sense of being predictable can easily lead to denial of even an already recognized ability.

Highly creative children's adjustment problems are centered in their psychological isolation and estrangement from their peers and teachers. Creative children can be "eccentric loners," sometimes going through school unnoticed, sometimes becoming the object of teasing and scorn (Varma, 1993). Asch (1955) found that there are very few people who can tolerate being a minority. Loneliness is a serious problem for highly creative gifted students—especially if they do not have anybody who can listen to their original ideas without criticism (Torrance, 1962, 1970). Because creativity involves independence of mind, nonconformity to group pressures, or breaking out of the mold, highly creative students may experience problems of adjustment. They must either repress their creativity or learn to cope with the tensions that arise from being different. Repression of creative needs may lead to personality breakdown, but expression of those needs leads to loneliness, conflicts, and other problems of adjustment (Torrance, 1962).

Unrecognized Creativity

Whitmore (1980) found that many unrecognized creatively gifted students were somewhat shy or nonassertive in the classroom. Some were children the teacher reported to be in frequent conflict with classmates. The disruptive child usually consumed a lot of teacher attention but did not show exceptional academic achievement

or potential. Some children became highly creative when they entered special programs for the gifted, but most of them had learned to suppress creative impulses or had not yet discovered them. This means that such students may only become aware of their potential for creative productivity and the intrinsic rewards derived from the act of creating once they were placed in an environment that encouraged creativity.

REVERSING UNDERACHIEVEMENT

The similarity between the characteristics of gifted underachievers and creatively gifted underachievers outlined above means that reversing underachievement in the gifted is possible using situations that work for the creatively gifted underachievers. The example by Whitmore (1980) above found that once creative students were in an environment that met their needs, they performed much better. Emerick (1992) indicated that when appropriate educational opportunities are present, underachievers respond positively, albeit, reversing the underachievement may take a long time and be difficult. Walker (1966) found that characteristics of highly creative high schools include opportunities for students to participate in decision-making processes of their schools; attempts to preserve student freedom and maximize personal responsibility; deemphasis on the need for orderliness and submissiveness in the individual; and deemphasis on conformity in the students' relations to the faculty, their peers, and their studies.

Less Restrictive Environments and Challenges

Both Whitmore (1980) and Butler-Por (1987) found that creative children's underachievement is minimized when school settings are least restrictive. Creative students have a high energy level that accompanies alertness and curiosity. They learn best when actively involved and not confined to seats for long periods of physical inactivity. They become frustrated with lack of challenge and active inquiry (Whitmore, 1980). Torrance (1962) indicated that one of the primary problems is the failure of the school to give creative students challenging tasks, so that misbehavior can often be seen as a reaction to the unchallenging, boring, and reproductive tasks given them in school.

Play and Fun

Teachers, parents, and families can help creatively gifted children by engaging them in playful activities (Amabile, 1996). If students believe that academics are fun, they will be motivated to extend their knowledge and eventually reach their potential. Fun should be viewed as one

of the most important attributes of gifted education because it motivates students to seek intellectual challenge and to continue to do so throughout their lives (Middleton, Littlefield, & Lehrer, 1992).

Hennessey and Amabile (1987) suggested that highly creative students should be encouraged to have pride in their own work instead making external rewards a goal. They suggested that it is important to avoid establishing competitive situations with other children; to avoid excessive oversight and have children monitor their own work; to give children choices about what to accomplish or how to accomplish required activities; to show children that adults value creativity by exposing them to intrinsically motivated adults who enjoy thinking creatively; to give children opportunities for free play with various materials; and, finally, by allowing children to engage in fantasy. Renzulli (1992) suggested that an appeal to the imagination should be a primary curricular focus for gifted students. Feldhusen (1981) also suggested that one of basic needs of gifted children is to stimulate imagery, imagination, and spatial abilities.

Teachers, parents, and families can help creatively gifted children by allowing them to pursue topics of strong interest (Reis & Hébert, 1985). Allowing students to explore a variety of topics and skills and then giving them the time to pursue some in depth is a way of reversing underachievement (Kirschenbaum, 1989). Gifted students perceive free choice of activities as motivating and engaging (Middleton et al., 1992). They prefer more arousal, more challenge, more aspects of the task tailored to their interests, and more control over an activity in the form of free choice and a preference for independent work than do average students. Allowing students to pursue topics of strong interest often results in high levels of achievement (Reis & Hébert, 1985).

Baum, Renzulli, and Hébert (1995) concluded that Renzulli's Type III enrichment unleashed the hidden potential of underachieving students by capitalizing on the potential for positive interaction among student abilities, interests, learning styles, and supportive student-teacher relationships.

Mentors and Adult Leadership

Chambers (1973) found that teachers who fostered creativity allowed choice of topics, welcomed unorthodox views, interacted with their students outside of class, and conducted classes in a more informal manner.

Torrance (1981a, 1994) concluded that teachers who made a difference helped students fall in love with a subject so intensely that it became the center of their future career image. Torrance (1981a, 1993) found that this future-image and passion was the best predictor of future creative achievement. His *Manifesto for Children* (Torrance, 2002) is based on these findings; reflected in

his 7-, 12-, 22-, and 40-year longitudinal studies, which began in 1958; and show the importance of a child pursuing his or her own interests. The *Manifesto for Children* is as follows:

1. Don't be afraid to fall in love with something and pursue it with intensity.
2. Know, understand, practice, exploit, take pride in, and enjoy your greatest strengths.
3. Learn to free yourself from the expectations of others and to walk away from the games they impose on you—Free yourself to play your own game.
4. Find a great teacher or mentor who will help you.
5. Don't waste energy trying to be well-rounded.
6. Do what you love and can do well.
7. Learn the skills of interdependence.

As Torrance's (2002) manifesto indicates, adult mentorship and understanding can have a strong impact because creative students are natural outsiders who often flounder in attempts at meeting seemingly contradictory needs. Teachers and counselors must help the creative students learn to tolerate and understand their separateness, and they must help them find someone with whom they can communicate (Torrance, 1962). Creative students must be supported to develop a great deal of self-confidence to go beyond the safe limits, to endure uncertainty, and to risk failure with the unfamiliar (Szekely, 1981).

Kirschenbaum (1989) found that highly creative teachers tend to have overachieving creative students, and less creative teachers have more underachieving creative students. Torrance (1962) suggested that the goal of guidance is not to promote individuality and creativity, but to encourage a healthy balance of individuality, creativity, and conformity. If students achieve a balance between creativity and conformity, they can actually enhance one another. Similarly, Crutchfield (1955, 1962) and Van Hook and Tegano (2002) concluded that both excessive conformity and excessive nonconformity hinder creativity. Amabile (1989) noted the difference between antagonism and creativity, saying that nonconformity for its own sake is insufficient for creativity.

Teacher Training

Teacher training in creativity and nonconformity is one highly recommended change. Storm and Storm (2002) suggested that rules guiding instruction in education should be changed for schools to support creative behavior. They listed teacher training in creativity as one of their recommended changes. Teacher training also has an impact on teachers' conformist attitudes and interactions with students. Murphy, Jenkins-Friedman, and Tollefson's study (1984) showed that training in

creativity influences teacher attitudes towards highly creative gifted students and that training reduces sex-role stereotyping. Hanninen (1988) found that teachers who had a gifted education background responded differently to gifted students when compared to preservice teachers or teachers without a gifted education background. Denno (1977) argued that elementary school teaching tends to attract people who are politically conservative, conforming, and submissive. Thus, these teachers may tend to reward students who have conforming behavior and punish students who have nonconforming behavior. Therefore, teacher trainers should encourage various personality types to enter the field and promote teacher acceptance of heterogeneity among students (Dettmer, 1981). Guskin, Peng, and Simon's study (1992) indicated that if teachers are exposed to a sufficient range of information about individual gifted or talented students, they are sensitive to the students' multiple intelligences and are also less likely to respond to students' gender, social class, and racial data.

Promising Models in Current Practice

Teachers can structure their curriculum and classroom in a way that meets all students' needs. Student-directed learning, such as Tomlinson's *Differentiated Classroom* (1999) or Renzulli's Type III Enrichment Model (1992), meets all students' needs from special education to the gifted.

Meeting the social-emotional needs of the highly creative student may seem challenging but proper mentorship and adult role models are keys to many students' success (Armendariz & Rodriguez, 2000; Hearn, 2004; Jacobson, 2000; Kelehear & Heid, 2002; Lindner & Dooley, 2003). All students need an adult that they can connect with, but finding a creative adult for highly creative students is essential. A creative adult can help the highly creative student navigate the bridge between autonomy and conformity so that they can learn the interdependence skills necessary for full creative achievement (Torrance, 1981a, 1993).

More subtly, teachers who model creative thought and an acceptance of differences (Kirschenbaum, 1989) provide a framework for self-acceptance and, most likely, a classroom environment where students are more likely to value each other's differences. Zimmerman and Dialessi (1973) found that student's fluency and flexibility scores increased when presented with a highly fluent live or simulated model via film. Similarly, bibliotherapy, especially through the use of biographies of eminent creators and social leaders, can help students gain self-understanding and acceptance (e.g., Hébert, 1991; Hébert & Kent, 2000). Videotherapy, or guided viewing of film, can facilitate creatively gifted student's

understanding of identity issues and social-emotional needs (e.g., Hébert & Speirs-Neumeister, 2002; Milne & Reis, 2000; Wilson, 2004).

Providing voice and choice to highly creative students gives them practice in successfully pursuing thoughts and ideas that are often divergent without having to rebel or withdraw to meet these needs. Classroom meetings empower students, helping them feel heard, giving them some control over their environment, and gives them a chance to voice and process diverging viewpoints. Many behavior problems can be avoided and handled within the context of classroom meetings (e.g., Angell, 2004; Edwards & Mullis, 2003). Choice and variety of assignments and assessments can benefit all students, but helps the highly creative students' need for choice and voice. Offering choice and variety helps all students by letting them play to their strengths, learning and showing what they learn in a way that helps them develop their own learning style. Teachers who provide some open-ended assignments or open-ended components may find success. Furthermore, a focus on process, meaning making, and understanding in learning rather than memorization of facts will help engage highly creative students.

CONCLUSION

The underachievement of gifted students is a chronic problem. Giftedness, which is usually identified by intelligence, does not rule out creativity, and many highly creative children do not do well in traditional school environments. The characteristics of gifted underachievers are similar to the characteristics of highly creative underachievers: They resist conformity; they have little social acceptance by their peers and by teachers; etc. Although more research is needed, the same models and procedures that are used for mentoring and fostering highly creative students may greatly increase the productivity of gifted underachievers. This gives educators a great opportunity to stop leaving behind gifted underachievers.

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