Gifted and Nongifted Middle School Students: Are Their Attitudes Toward School Different as Measured by the New Affective Instrument, My Class Activities . . . ?

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This paper describes a study in which the attitudes of gifted middle school students were compared with other middle school students, using a survey instrument that measures the dimensions of interest, challenge, choice, and enjoyment—dimensions rooted deeply in gifted education and central to learning. Although statistical differences were found between the two groups, the effect size was so small that the findings were interpreted to indicate that gifted students viewed their class activities essentially the same as the other students in this study. Each group reported their class activities were only slightly more than “sometimes” interesting, challenging, and enjoyable and that they were slightly more than “seldom” offered choices in their educational activities. These findings offer insight into how gifted and other students view their class activities and have implications for practices that may affect motivation and learning for all students.

Statement of the Problem

Educators from the field of gifted education have long called for using student interests as a basis for designing challenging learning experiences for gifted and talented students. Further, they have suggested that learning should be student driven through the inclusion of meaningful choices, thereby creating an enjoyable environment where the learner becomes autonomous and self-directed. In efforts toward general school improvement, it has been suggested frequently that these strategies from gifted education be extended to general education students as a means of creating engaged learners (Bloom, 1985; Goodlad, 1984; Hopfenberg & Levin, 1993; Renzulli, 1998).

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1994; Renzulli & Reis, 1985; Slavin, 1984; Tomlinson & Callahan, 1992; U.S. Department of Education, 1993; Williams, 1986). Further, it is often claimed that gifted students may be unchallenged or bored in their regular classrooms (e.g., Feldhusen & Kroll, 1991; Gallagher, 1985; Kunkel, Chapa, Patterson, & Walling, 1992; Renzulli, 1994; Sisk, 1988; U.S. Department of Education, 1993); and it has been reported that little differentiation of curriculum and instruction occurs for gifted children in regular classrooms (e.g., Archambault et al., 1993, Reis et al., 1993). These issues raise questions concerning how all students perceive their general education classrooms with regard to the dimensions of interest, challenge, choice, and enjoyment and whether there are differences between gifted students' perceptions and other students' perceptions of their regular class activities on these dimensions.

Recent research has indicated that there is little difference in what occurs in classrooms for gifted students and average students, yet this research relies on self-report data from teachers (Archambault et al., 1993) and on direct observation of classroom practices (Westberg, Archambault, Dobyns, & Salvin, 1993). Although the perspectives of classroom teachers are important, little has been reported that incorporates reliable perceptions from students regarding their classroom experiences. Clinkenbeard (1991) provided insights into how a small sample of gifted students viewed their experiences in gifted classes compared to their experiences in regular classes by examining essays that students wrote on the subject. A major finding of this study was that gifted students seemed to believe that outside of the gifted program expectations of peers and teachers were unfair. This study sought to compare the perceptions of middle school students who were identified as gifted and who received gifted education services from their schools with other students regarding the frequencies with which they were provided with the dimensions of interest, challenge, choice, and enjoyment in their regular education classrooms.

Review of the Literature

Characteristics of middle school students include negative changes in motivation, self-concept of ability, attitude toward school, and academic performance (Anderman & Maehr, 1994; Eccles & Midgley, 1989). Explanations for the negative changes include the psychological upheaval assumed to be associated with early adolescence (Blos, 1962). In addition, the educational experiences in the classroom have been found to have significant effects on the magnitude and direction
of motivational changes (Feldlaufer, Midgley, & Eccles, 1989; Moore, 1983; Power, 1981). A comprehensive longitudinal study found evidence of motivational change based on how students’ ability beliefs and achievement values change as they transition from elementary to middle school (Eccles, Wigfield, Midgley, et al., 1993).

In the fall and spring of sixth grade and seventh grade, a group of 2,500 students was studied. The study included a questionnaire to measure the self-concepts of ability and valuing of academics activities, sports, and social activities. Specifically, the researchers found the students’ general self-esteem was lowest in the fall of the seventh-grade year, during the transition period. Student self-efficacy theory is an important part of motivation (e.g., Bandura, 1977). Thus, a link between motivational declines and the middle school transition seems to be occurring (Blyth, Simmons, & Carlton-Ford, 1983; Eccles & Midgley, 1989; Eccles, Midgley, & Adler, 1984; Simmons & Blyth, 1987). Student boredom is linked to negative motivation. In a national educational longitudinal study, researchers surveyed 25,000 eighth graders and found that nearly 50% claimed they were bored in school half or most of the time (Rothman, 1990). Considering the information about middle school students and motivation, it follows that changes need to occur in order to boost motivation and learning. The enhancement of learning is possible if schools provide challenging and interesting educational experiences in which students are afforded choices in an enjoyable environment. In the sections that follow, the dimensions of interest, challenge, choice, and enjoyment are discussed.

Interest

Addressing, creating, and holding student interests have long been a concern of educators. More than a century ago, William James (1890) suggested that awakening and nurturing children’s interests were central to learning. Dewey (1913) promoted educators to discover, develop, and build upon the abilities and interests of the child. Educators from the field of gifted education have called for interest to be central in determining a child’s educational program (Gallagher, 1985; Maker, 1982; Parke, 1989; Passow, 1982; Renzulli, 1978, 1994; Ward, 1980). However, as Good and Brophy (1987) suggested, all students, regardless of their achievement levels or background, should have the opportunity to explore their interests. Researchers have found that middle school students often view school as uninteresting (Eccles et al., 1989). Hootstein (1994) suggested making learning relevant and interesting to middle school
students by relating to students' needs, interests, concerns, and experiences and by encouraging students to pursue their own interests.

A review of the literature documented positive results for students allowed to pursue their own interests in reading and classroom activities. Specifically concerning reading, students who were allowed to select reading material based on topic interest were found to have significantly higher comprehension than those students assigned readings (Asher, Hymel, & Wigfield, 1978; Bernstein, 1955). A study of 93 fifth- and sixth-grade students in a public school in a small midwestern city tested the effect of interest on reading comprehension (Stevens, 1980). The students read paragraphs on topics previously identified as high or low interest to them. The results were analyzed by ability level, gender, and interest level. Although the sample was small, interest was related to increased comprehension only for high-ability students.

With regard to interest and its relationship to classroom activities, middle school students responded to inquiry-based activities utilizing topics and issues relevant to society and to early adolescents (Currier, 1986). Tassinari (1996) utilized inquiry-based projects and found, as the students became more interested and motivated in their work, they also began to take more responsibility for their learning and, therefore, learned more efficiently — clearly, a connection among intrinsic motivation, interests, and learning. Further review of the literature identified a study designed to compare high-interest and low-interest activities with regard to different indicators of student comprehension and, thereby, to reflect varying degrees of processing depths (Schiefele, 1991). Schiefele found a moderate to strong relationship between interest and learning strategies and concluded that interest is an important motivator for the use of learning strategies that facilitate deep processing. Other researchers have also documented the connection between interest and intrinsic motivation (Deci & Ryan, 1985; Tobias, 1994).

Challenge

Challenge is often viewed as essential for optimal learning and quality education (Bloom, 1985; Shore, Cornell, Robinson, & Ward, 1991; Vygotsky, 1962). The federal report National Excellence: A Case for Developing America's Talent (U.S. Department of Education, 1993) called for setting more challenging standards, including providing students more challenging opportunities to learn. These standards are important because a lack of challenge leads to boredom in school for both gifted and nongifted students (Feldhusen & Kroll, 1991).
Boredom in school decreases motivation to learn and may lead to underachievement. Work by Lev Vygotsky in the early 1920s and 1930s suggested challenge as critical to good instruction, and this work has become increasingly popular in recent years. In his "Zone of Proximal Development," Vygotsky (1987) stressed keeping instruction paced just slightly ahead of the student's development in order to achieve maximum learning. More recently, learning theorists have demonstrated that moderately difficult tasks are a prerequisite for maximizing intellectual development, thereby supporting the call for more challenge in the classroom (Clifford, 1990; Fischer, 1980; Paris & Turner, 1994). Malone and Lepper (1987) and Lepper and Hodell (1989) studied the incorporation of challenge, interest, and perceived control in classrooms by designing specific project-based tasks and learning activities. They concluded that the assignment of these tasks offered personal challenge, gave students a sense of control over the process or product, and tapped students' interests over time. Despite this information, recent research continues to find that challenge is absent in many of America's classrooms (Archambault et al., 1993; Goodlad, 1984; Reis et al., 1993; Westberg et al., 1993).

Choice

Providing students with choices is a powerful method to motivate them and has often been recommended to enhance student learning (Bloom, 1985; Dewey, 1913, 1916; Gardner, 1991; Goodlad, 1984; Holt, 1983; Renzulli & Reis, 1985; Shore et al., 1991; Wang & Lindvall, 1984). Students, especially at the middle school level, view choices as support for their decision-making abilities. However, this is true only when the choices are perceived as equal or structured in such a way that the child's choice is guided by interest and not by an intent to minimize effort, protect feelings of self-worth, or avoid failure (Ames, 1992; Ryan, Connell, & Deci, 1985). Offering middle school students choices and autonomy as a means for increasing motivation is evident in the adolescent literature (Ames, 1992; Deci & Ryan, 1985; Eccles & Midgley, 1989).

Turner and Meyer (1995) suggested that one of the most evident characteristics of middle school students is their strong desire for independence and to make decisions. As youths enter adolescence, there is a struggle for autonomy and freedom. Educators might consider using this need as a means of reaching students rather than as a problem to be controlled. However, middle school students only value choices they perceive to have significance, such as selecting...
units of study, topics for writing, resources for use, ways and means for showing, and methods for sharing what they have learned (Currier, 1986).

Choices are also important in developing grouping arrangements. With regard to grouping assignments, Rogers (1991), in her analysis of grouping, and Robinson (1991), in her review of research on cooperative learning, concluded that students seek choices regarding group assignments and whether they work alone or with others. Allowing students choices also is a way of imparting responsibility and control to them. Control appears to be a significant factor affecting student engagement in learning and quality of learning (Ames, 1992). Autonomous behavior that is self-determined, freely chosen, and personally controlled elicits high task interest, creativity, cognitive flexibility, positive emotion, and persistence (Deci & Ryan, 1985). Thus, choice within educational activities offers students ownership and control of their learning and may serve to enhance relevance, achievement, and belonging for middle school youth.

Enjoyment

Student enjoyment is also instrumental in the learning process (Csikszentmihalyi, 1990; Dewey, 1916; Renzulli, 1994; Schiefele, 1991). Providing a learning situation that is both enjoyable and engaging for the student is essential for student involvement and learning. Renzulli proposed that learning is most effective when children enjoy what they are doing and that creative, productive individuals perform at optimal levels when they are doing what they enjoy. Currier (1986) suggested that middle school students need to explore real issues that have an impact on their own world. She recommended that middle school students be offered choice, inquiry, and a variety of high-interest learning activities that address individual differences among students, while facilitating student learning by helping students plan, follow these plans, and self-evaluate. A comic book reading study with middle school students identified the link between learning and enjoyment (Ujiie & Krashen, 1996). One conclusion of the authors was that those students who read more comic books did more pleasure reading, liked to read more, and tended to read more books. Another example of middle school student enjoyment was Tassinari's (1996) research on the use of projects with students. His social study projects incorporated various skills, such as critical thinking and cooperative learning. Middle school students enjoyed these projects and were identified as thinking and working in a collaborative, yet productive, learning environment. By incorporating
strategies similar to those found in the literature, it is possible to create enjoyable learning environments that remain attractive to middle school students.

Middle School-Aged Learners

Roeser and Eccles (1998) demonstrated adolescents' school perceptions to be significant predictors of student academic and psychological adjustments at the end of eighth grade. The adolescent students, as Erikson (1968) described them, were proceeding through a period of "storm and stress." Many adolescents, when entering middle school, perceive school as uninteresting and unimportant (Eccles et al., 1989). Further, as suggested by the literature, changes in the learning environment that occur from elementary school to middle school may affect the changes in the academic motivation, achievement, and behavior of students (Eccles, Wigfield, Midgley et al., 1993; Midgley, Anderman, & Hicks, 1995). The decline in motivation may lead to what Clifford (1990) termed school abandonment. She stated that school abandonment is a systematic failure affecting the most gifted and knowledgeable as well as the disadvantaged and that it is threatening the social, cultural, moral, and psychological well-being of the country. Deci and Ryan (1985) suggested that providing opportunities for autonomy and participation in learning might have a positive influence on adolescent motivation, behavior, and psychological well-being. Clearly, the dimensions of interest, challenge, choice, and enjoyment are important areas to consider when educating adolescents. Further, in education, there is emphasis placed on specific measurement of elements of education.

Gifted Middle School Students, Differences!

It has long been asserted that gifted students are at risk of not having their needs met in the regular classroom (e.g., Archambault et al., 1993; Gallagher, Harradine, & Coleman, 1997; Reis et al., 1993; Sisk, 1988; U.S. Department of Education, 1993; U.S. Department of Health, Education, and Welfare, 1971; Ward, 1961). Consequently, special programs for gifted students have been implemented in many schools across the country. Federal reports continue to challenge educational standards (e.g., U.S. Department of Education, 1983, 1993; U.S. Department of Health, Education, and Welfare, 1971), and international comparisons continue to find America's students near the bottom in science and math (Johnson, 1998;
Silver, 1998; U.S. Department of Education, 1993). One conclusion from all this is that gifted students are bored in the regular school setting; therefore, it would follow that they would report less challenge than their nonidentified peers. Given the issues of boredom and lack of challenge, one might also question whether gifted students find school interesting or whether they perceive that they are provided choices when compared to other students. As Stevens (1980) suggested, interest played a significant role in the reading comprehension of high-ability students but not for other students. The implications are that gifted students may, in fact, learn more if they are interested than if they are not interested in the task they are given. Again, looking toward student perceptions of their class activities can provide valuable insights into these classrooms. Further, investigating differences in perceptions among students who are identified as gifted and other students can help researchers to understand whether such differences are perceived by the students. The lack of suitable instrumentation to date has made this type of comparative study relatively uncommon. In other words, little in the literature exists to either substantiate or discredit the notion that gifted students perceive differences in the levels of challenge, interest, choice, or enjoyment than other students in school. Conversely, several studies have documented through teacher report and observation the existence of such differences (e.g., Archambault et al., 1993; Westberg et al., 1993).

Methods and Procedures

This study employed a group-administration survey research design that was causal comparative. Identified gifted students were compared with other students who were not identified for any special programs regarding their attitudes toward their class activities on the dependent variables of interest, challenge, choice, and enjoyment using multivariate analysis of variance (MANOVA) with discriminant function analysis (DFA) follow-up procedures.

Sample

The researchers used the collaborative school districts with the National Research Center on the Gifted and Talented (NRC/GT) at the University of Connecticut. The advantages of using these schools were many: They volunteered to cooperate with the NRC/GT in data-gathering efforts; their demographics are on file; they exist in
every state, and they represent every form of school district, including rural, urban, and suburban. The sixth-grade through eighth-grade middle school sample included 35 classrooms (in subjects including social sciences, language arts, science, math, art, and Spanish) from seven schools in five states from the northeastern, midwestern, and western United States. The sample for the present study consisted of 787 students and was primarily Caucasian ($n = 695, 88\%$). Other groups represented were African Americans ($n = 31, 4\%$) and Asian Americans ($n = 49, 6\%$).

Those students who were identified for and received special programming in gifted education from their respective districts were compared with other students who were not identified and who did not receive any sort of special services. Consequently, any students from the sample schools who received special education, compensatory education, or other remedial services were eliminated from the present data set to facilitate comparison of identified gifted students with their regular education counterparts. This was done to eliminate the possibility of differences due to comparing students from opposite ends of the continuum of special services (i.e., gifted students with those who were receiving remedial services). Of the 787 students in the sample, 114 students were identified as gifted and 673 were nonidentified, other students. In grade 6, there were 25 gifted and 186 other students; in grade 7, there were 46 gifted and 342 other students; in grade 8, there were 43 gifted students and 145 other students. It should be noted that the definitions used by each district to identify and service gifted students were used to form the identified gifted group for this research. Although there was some variability among the districts, all used some standardized achievement testing together with teacher, parent, and student self-identification measures for inclusion in their respective gifted programs. The types of gifted programs in these districts ranged from weekly pull-out programs to daily special classes. Although this variability in identification and programming methods is a weakness of the study, it is also representative of the variability that exists across the country in these areas. In all, about 14% of the middle school students in this sample had been identified as gifted and were receiving gifted education services from their respective districts.

Instrumentation

The instrument used to measure student attitudes in this study, My Class Activities... (Gentry, Gable, & Rezendes, 1999; Gentry, Maxfield, & Gable, 1998; Gentry, Rizza, & Gable, in press), has
undergone extensive validity and reliability study. The dimensions measured by this instrument were operationally defined by the developers during a pilot study as follows:

- Interest reflects positive feelings, a preference for certain topics, subject areas, or activities.
- Challenge engages the student and requires extra effort.
- Choice gives the student the right or power to select educational options and direct his or her own learning.
- Enjoyment provides the student with pleasure and satisfaction (Gentry et al., 1998).

Initially, content validity was investigated using a panel of 16 content experts, including teachers, program coordinators, university professors, and graduate students, who reviewed the pilot instrument and provided judgmental data concerning item-to-dimension placement (Gentry et al., 1998). Specifically, for use with middle school students, construct validity and reliability were investigated using confirmatory factor analysis, item response theory, latent trait analysis, and alpha internal consistency reliability estimation (Gentry et al., 1999). The authors reported a Tucker-Lewis goodness-of-fit index of .88 and mean root square residual of .09 and suggested that the construct validity of the four-dimension solution was supported by the data. Further, an examination of construct validity through item response theory suggested that the definitions of each dimension had adequate depth and that the five-point response format operated effectively. For the grade 6–8 sample in the validity study, alpha reliability estimates for the four dimensions ranged from .75 to .92, which are considered quite good for this type of an affective measure (Gable & Wolf, 1993). For the present study, we checked the alpha reliability estimates of the data for each dimension and found them to be consistent with those previously reported with interest (.89), challenge, (.76), choice (.73 ), and enjoyment (.92).

Data-Collection Procedures

The My Class Activities... instrument contains 31 items responded to on a five-point frequency scale [never, seldom, sometimes, often, always]. Data for the present study were gathered during the 1996–1997 and 1997–1998 school years. Surveys were administered in school to the 35 classrooms by contact persons from each district. Contact persons were used for two reasons. First, to help ensure uniformity in the administration of the instrument, each contact person followed the same set of directions and administered the instrument in school to a classroom of students, resulting in a 100% return rate.
for all students present during the administration. Second, by using contact persons who informed students that their teachers would not see their responses, students were more likely to answer honestly than if the instrument had been administered by their teachers, although we have no assurance that they did, in fact, answer more honestly. Student demographics were collected from classroom teachers and included sex, ethnicity, special programming, and achievement levels.

Results and Discussion

Identified Gifted Versus Nonidentified Other Students

The data from the four My Class Activities... dimensions were compared for students participating in gifted programs and other students who received no special program services.

A MANOVA was run to determine if the identified gifted students differed in their responses from the nonidentified other students. Overall, the Wilks's Lambda (.985) for the MANOVA indicated that the groups differed on the four My Class Activities... means ($F = 3.02; df = 4,781, p = .017$). However, the significant difference is mostly driven by the large sample size for the students not in the gifted programs. In fact, the $R^2$ value of .015 (1 - Wilks's Lambda; Tabachnick & Fidell, 1989) does not approach even the small effect size (Cohen, 1988). We conclude that the identified gifted and nonidentified other students had essentially similar views toward class activities and that it was not necessary to follow up the MANOVA with the DFA procedure. Table 1 contains the means for each group for the four respective dimensions; and, although the means are essentially the same, as discussed above, the largest difference existed on the dimension of Choice, with the gifted students reporting less choice (by about one standard deviation) than their nongifted peers.

Discussion

This study compared the attitudes of students identified for gifted education services with those of other students who were not identified for such services. While a slight difference did exist, this difference was primarily due to a large sample size—meaning that, in effect, gifted students’ attitudes toward school were essentially the same at the other students’ attitudes. In light of the literature that
suggests gifted students are often bored in regular classrooms and Clinkenbeard's (1991) findings that gifted students perceived unfair expectations from their regular education teachers, these findings are somewhat surprising. However, examination of the mean scores for interest, enjoyment, challenge, and choice (see Table 1) provides some disturbing insights regarding how all middle school students in this sample viewed their classroom activities. Both groups found their classrooms sometimes enjoyable, challenging, and interesting. Yet, regarding choice, the gifted students' mean score indicated that they were seldom given choices, and the mean score of the other students indicated that choice was offered somewhere between seldom and sometimes. These findings are consistent with the findings of Archambault et al. (1993), Westberg et al. (1993), and Goodlad (1984), who all reported a lack of challenge, few instructional strategies, and little engagement of students with curriculum in the classrooms they studied. Goodlad presented a picture of total group instruction, with the teacher as the central figure determining both the activities and tone of the classroom. He found a narrow range of classroom activities that included listening to the teacher, writing answers, working at desks, and taking tests and quizzes. He stated:

Only rarely did we find evidence to suggest instruction likely to go much beyond mere possession of information to a level of understanding its implications and either applying it or exploring its possible applications. Nor did we see activities likely to arouse students' curiosity or to involve them in seeking solu-
tions to some problem not already laid bare by teacher or textbook. [p. 236]

Given the recent national attention focused on improving schools, one might hope, 15 years later, that students would find their classrooms often interesting, challenging, and enjoyable and that they would be offered choices often, as well. Unfortunately, students in this study indicated otherwise.

We might have expected a difference in attitudes between the gifted students and others based on the literature that reveals a lack of challenge and boredom for gifted students in school. However, it appears that these students have the same views toward their classroom experiences on the dimensions of challenge, choice, interest, and enjoyment as do other students. As the teachers in the Archambault et al. (1993) study reported and the observations in the Westberg et al. (1993) study indicated, few differences in curriculum and instruction exist for gifted students in the regular classroom, and most students spend the majority of their day doing the same things. Therefore what this study has done is confirm that students find their classrooms only sometimes interesting, enjoyable, challenging, and seldom offering choices. The attitudes of these two groups of students, although similar, provide evidence regarding the continued need for improved instructional and curricular strategies and improved learning climates that students will find more engaging and, thus, motivating. Perhaps an increase in the frequencies with which students are provided choices and challenges in school as well as an increase in activities in the classroom that students find interesting and enjoyable might lead to increases in student motivation and achievement.

**Integrating Interest in the Classroom**

There are several steps that classroom teachers could take that might address the dimension of interest in their classrooms. First, teachers might consider, as suggested by Renzulli (1994), determining existing areas of student interests by administering an interest assessment. This information could then be used in helping students choose areas in which to work as well as the basis for independent studies or investigations. Once known, student interests could also be used in the general curriculum as appropriate, thus providing a more personal and connected approach to curriculum. Developing student interests by exposing them to ongoing topics and areas not traditionally addressed in curriculum could also serve as a method for addressing the idea of interest in the classroom.
Finally, teachers might examine their own strengths and interests as a basis from which to draw to be interesting in their instructional pedagogy—similar to the ideas of artistic modification suggested by Renzulli (1988) or appeal to the imagination suggested by Phenix (1964). As previously discussed, interest is central to motivation and learning—especially for the middle school learner. Making deliberate efforts to discover, develop, and connect to student interests could have positive effects on student attitudes, engagement, and learning.

Ensuring Appropriate Levels of Challenge

Raising the frequency and levels of challenge in the classroom is another area that middle school teachers might want to consider. The methods and processes by which challenge can be delivered in schools include presenting high-level content, using advanced thinking skills, using advanced and authentic methodologies, developing products or services for audiences, and compacting curriculum (Bloom, 1985; Reis et al., 1993; Renzulli, 1994; Schlichter, 1986; Treffinger, 1986; U.S. Department of Education, 1993). Using flexible grouping to deliver differentiated curriculum and offering the opportunity for accelerated learning are additional means for providing students with appropriate challenges in learning (Gentry & Owen, 1999; Rogers, 1991). Because success has been tied to challenge and optimal learning has been shown to occur when tasks are challenging (Clifford, 1990; Fischer, 1980; Paris & Turner, 1994), high expectations and conscious efforts to provide challenges to students more often than their perceived “sometimes” are important considerations. As Crockett (1994) suggested, adolescents are motivated to learn when tasks are developmentally appropriate, relevant to their lives, and sufficiently challenging.

Providing Choices That Motivate

Providing students with choices is probably the simplest modification that teachers can make to increase motivation and learning, and this modification is especially important for middle school students. Given the perceptions of the students in this study and the connection of choice to motivation in the adolescent literature (e.g., Ames, 1992; Deci & Ryan, 1985; Eccles & Midgley, 1989), serious consideration should be given to providing middle school students with more meaningful choices (Currier, 1986). Rather than giving the assignment with explicit expectations for its completion, which encourages following directions and compliance, teachers might want to consider giving several choices for demonstrating mastery of curriculum. Included in these choices
might be an "other" that is left to the student to suggest. For example, rather than assigning an oral book report, students might be provided with options to produce a commercial, write a critique, develop a discussion group, create a PowerPoint presentation, or design an interactive web page concerning the book. Further, if none of these options is attractive to the students, then they could suggest an original idea for a product or performance. In this manner, involvement, interest, ownership, quality, and creativity are likely to be stimulated (Deci & Ryan, 1985). Turner and Meyer (1995) suggested that teachers take advantage of the adolescent's desire for independence and decision making and allow them the option of self-evaluation as a means for increasing performance and motivation. Choice of types of assessments, group members (or not), order of curriculum, specific content, audiences, and relevant homework are other not-so-difficult-to-integrate types of choices that can be offered to students.

Making the Classroom Enjoyable

Finally, concerning the dimension of enjoyment, there are several suggestions for making the classroom a more enjoyable place. By attending to student interests and offering choices, perceptions of enjoyment are likely to increase. Even the increase in challenge might positively affect enjoyment since students often derive satisfaction from appropriate challenge and learning (Malone & Lepper, 1987). Use of projects and collaboration has been shown to increase enjoyment among students (Slavin, 1996; Tassinari, 1996). Therefore, teachers might want to consider building projects into the curriculum as well as opportunities for group work in which all members have roles that suit their strengths (Renzulli, 1994). Pollak and Freda (1997) suggested that humor is related to building student empowerment, creative thinking, self-esteem, and socialization at the middle school level. Therefore, one should not overlook the explicit use of humor on a regular basis to infuse enjoyment in the classroom. Through encouraging laughter, humor, and positive energy, the classroom environment can be an enjoyable learning place for both students and their teachers.

Limitations and Suggestions for Future Research

We recognize several limitations that affect this study. Among them is the issue of which students were identified as gifted by their districts, the variation in this process among the schools in
the sample, and the probability that there were unidentified gifted students in the group to which the gifted students were compared. The existence of gifted students in the "other" group may have contributed to the lack of practically important differences between the groups. Error exists in the instrumentation, and this too may have contributed to the lack of differences between the groups. The definitions of the dimensions cannot capture the complete essence of each dimension, and the results and recommendations need to be interpreted with consideration to the dimensions as defined in the scope of the instrumentation. Obviously, there is much more to Challenge or Enjoyment than could be simply measured by one instrument. Further, the My Class Activities... instrument only measures four of many important affective dimensions; and further insights into student perceptions are warranted in follow-up investigations. Qualitative interviews with a sample of students in future research might yield significant and complimentary understanding to these quantitative findings. This study was limited to the attitudes of gifted and other students toward their regular classroom activities. Further research that takes into account other kinds of learning environments, such as gifted programs or deliberately differentiated classroom environments, would provide valuable information. Looking to student perceptions of their class activities can provide insight into classrooms from the students' points of view. Unfortunately, little such research exists, especially that examines how gifted students compare with other groups. Such information can then help teachers reflect on their practices and researchers better understand classrooms as students experience them.

References


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