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Student and teacher attitudes toward giftedness in a two laboratory school environment: A case for conducting a needs assessment

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Introduction

University lab schools are quite rare. Although there are similarities across them, they tend to vary considerably based on the historical and geographic context in which they were formed. On the other hand, every lab school faces contemporary issues of the day. Funding, accountability, teacher training, inclusion, national standards, and accommodating the students' varying abilities are common examples of these issues. In this article, we explore the beliefs of the faculty and students of two special schools, one a traditional K–12 laboratory school (Lab School) that has been in existence for more than 80 years, and the other the state's residential high school for 11th and 12th grade intellectually gifted students (Academy) founded in 1988. Students and faculty of both schools share facilities. In essence, this setting is quite unique and deserving of description as it reveals belief systems that hold significant ramifications for creating optimal learning environments for gifted students in which preservice educators can be trained.

This study began after the dean of the college of education that administers both the Lab School and the Academy mandated that 100 new gifted students would be added to the overall enrollment of the Lab School. This change would raise the enrollment of the Lab School to approximately 550 students; the Academy maintained approximately 300 students, making a total of 850 students who used the facilities on a daily basis. The dean was convinced that a lab school should have a student body consisting of gifted students (30%), students identified with one or more disabilities (30%), and students who would be described as "normal" or typical learners (40%). He believed that training would be enhanced by opportunities for preservice teachers, school counselors, and school psychologists to work with this diverse student body.

The Lab School employed a faculty of about 50 teachers and administrators, while the Academy employed approximately 30 full-time and several part-time faculty. Additionally, myriad university courses were open to the high school students from both schools. Both schools' students also had access to university facilities such as the library, gymnasium, and so forth.

The two schools had developed a working relationship over the 20-year lifespan of the Academy and agreed to share resources for the benefit of the students and the schools. For example, to maximize efficiency, students would take courses from each school had the option to take courses from the university sponsor as well. The Academy offers several courses nationwide via distance education technology, and Lab School students were able to take those courses. Students from both schools also had options to participate in clubs that originated

in either school or in the lab school athletics. Dances tended to be school-specific, however.

The Challenge

Creating a philosophy and practice of gifted education that could be supported by the faculty and students in these two schools was a very complicated task. The Lab School prided itself on maintaining an inclusion model, while the Academy instructional model was based on pretesting and placing students in the most rigorous courses that they could manage. More than half of the faculty at the Academy held doctoral degrees, and all had at least a master's degree. Academy teachers' style of teaching was more like that of college classes than high school classes. Also, the Academy faculty was split on matters such as whether Advanced Placement (AP) courses should be taught. The math and science faculty believed it was an appropriate curriculum for the school, whereas the humanities faculty believed the curriculum should be grounded in gifted education pedagogy. In contrast, Lab School faculty were K–12 generalists. Very few held certification in gifted education, and the school emphasized inclusion of all students, with a wide range of abilities and disabilities served in each classroom. The faculty from the Lab School were considered clinical faculty of the college of education, while the faculty of the Academy felt more closely associated with the arts and sciences faculty of their content areas across the university campus. All this, combined with the fact that the two schools served two models of grades (K–12 vs. 11th and 12th), suggested that two distinct cultures existed at both schools.

Prior to admitting the 100 new students, the Lab School principal and his supervisor decided to find out what perceptions and beliefs were held by the faculty and students of the two schools. It was believed that, with this information, more effective professional development could be implemented. This manuscript describes the findings of this assessment, situating them in the context of the gifted education literature. We believe that the lessons learned from this unique setting have implications for any lab school charged with providing such services.

Literature Review

The success of services for students with gifts and talents depends on the support they receive from educators and students alike. Without administrator support, resources necessary for success will not be committed. Without teacher support, appropriate educational accommodations will not be made. Without student support, the social pressures against the achievement of which they are capable may be too great for gifted students to resist (Coleman & Cross, 1988).

Research and anecdotal evidence suggests that many stakeholders are ambivalent about gifted education (e.g., Bégin & Gagné, 1994a; Kerr, Colangelo & Gaeth, 1988; McCoach & Siegle, 2007). Evaluating attitudes toward gifted education is an important first step in planning for the implementation of gifted services.

Although the review of the literature that follows indicates an empirical base of evidence for ambivalence toward gifted individuals and services for them, there are, in reality, very few studies of attitudes toward the gifted and gifted education. The few studies that exist took place primarily in the 1980s. With the exception of the McCoach and Siegle (2007) study, little research has been done on attitudes toward the gifted since then. This study contributes to the sparse research base.

Gifted Students' Need for Social Interaction and the Stigma of Giftedness

The need for positive social interactions is universal and serves as a powerful motivator of human behavior (Deci & Ryan, 1985; Ryan & Deci, 2000). Gifted students are like typical peers in their need to find friends and have positive social interactions. A number of studies have found gifted students to be among the popular students in their school or class (Farmer & Hollowell, 1994; Luftig & Nichols, 1990; Newcomb, Bukowski, & Pattee, 1993). Kerr et al. (1988), however, found that 90% of their sample of gifted high school students ($N = 184$) believed that their giftedness was a negative in the social realm.

Group pressures against non-normative behaviors, even when they are positive (e.g., achievement in school), can result in devaluing of and disliking the successful group member. In his study of in-group and out-group behaviors, Saunders (2008) found that in-group members may be derogated or excluded as if they were out-group members when they exhibited positive behaviors that were not the norm of the in-group, evidence of his *White Sheep* hypothesis.

In 1954, Margaret Mead, renowned anthropologist, wrote about gifted children in American culture and the challenge they face in being socially accepted:

there is an increasing emphasis in American life on happiness, defined as “enjoying life, living among friends who live the same way I do”, contrasted with success which takes too much out of you, kills you at forty, or “being a brain and missing all the fun”. Any degree of outstanding success is represented as cutting one off from the group so that it becomes fashionable not to get better grades than the others, not to be too good, not to go up too fast. These pressures for keeping on all fours

with one's classmates, neighbors, business associates, which are increasing in American life, tend to be particularly felt in the school age groups, especially in the case of the child who shows intellectual or artistic gifts. (p. 211)

A half-century later, the pressures Mead describes endure. For example, Manaster, Chan, Watt, and Wiehe (1994) reported that 87% of 144 gifted youth claimed the “worst thing[s] about being gifted” (p. 177) were social in nature, including stereotyping, jealousy, and social isolation. Tannenbaum (1983) claimed that some gifted students “would rather underachieve and be popular than achieve honor status and receive ostracism” (p. 466).

Even teachers have been found to prefer nonstudious, athletic gifted children over more studious and nonathletic gifted children (Cramond & Martin, 1987). Teachers ($N = 80$) surveyed about characteristics of students considered gifted students to be “odd” in comparison to nongifted students (Halpern & Luria, 1989). In contrast, Vialle, Heaven, and Ciarrochi (2007) found that teachers considered gifted students to be better adjusted than their nongifted peers. The gifted students in the same study, however, reported greater feelings of sadness and lack of social support than their nongifted peers, suggesting a poor understanding on the part of teachers of the difficulties faced by gifted students.

All students must learn how to function socially, but gifted students uniquely face these pressures to not achieve academically. In studies of social coping strategies used by gifted students, Swiatek and colleagues have found that students may deny or hide their giftedness, use humor or social interaction, or de-emphasize the importance of peer popularity (Swiatek, 1995, 2001; Swiatek & Cross, 2007). Cross, Coleman and Terhaar-Yonkers (1991) found that gifted high school students were likely to deny their abilities in social settings that draw attention to them. The use of these strategies differs with age (Swiatek, 2001) and environment (Swiatek & Cross, 2007), indicating the changing influence of the stigma of giftedness (Coleman & Cross, 1988, 2005) over time and in various settings.

Negativity toward gifted students is not the only challenge faced by advocates for gifted services. Teachers of the gifted and college professors teaching gifted education ($N = 338$) were surveyed about the “state of the field” in the mid-1980s (Delisle & Govender, 1988). Respondents reported the most “disheartening aspects” of the field for them were negative attitudes toward gifted programs by classroom teachers, administrators, or society. McCoach and Siegle (2007) found general support for gifted education in their sample of 262 teachers, but special education teachers were less supportive. Training in gifted education

made no difference in attitudes of support for gifted education in McCoach and Siegle's sample, although in other studies training was associated with greater support (Bégin & Gagné, 1994a). In a report of Ontarians' support for gifted services, 63% of the 1,048 respondents to a public survey indicated that such services should occur "only if it does not result in resources being taken away from classes of average students" (Grayson & Hall, 1992, p. 22). Both Grayson and Hall and Bégin and Gagné (1994b) found a relationship between support for gifted services and higher socioeconomic status.

These studies suggest that, at a minimum, teachers, administrators, and the general public experience ambivalence toward gifted students and gifted education. This ambivalence can translate into roadblocks to the provision of an appropriate education for students with high academic abilities. In a survey of parents, Erickson, Gray, Wesley, and Dunagan (2012) found one reason parents choose to place their children in laboratory schools is for the gifted education they sometimes provide. For a laboratory school to successfully provide what gifted students require, ambivalence or opposition among stakeholders must be identified and addressed.

Method

Two overarching research questions guided this study: (1) Was there support for gifted education in both schools? and (2) Were attitudes toward gifted education different among faculty and students of the two schools?

Participants

Participants were 47 teachers (30 from the K–12 Lab School and 17 from the Academy) and 124 11th- and 12th-grade students (see Table 1 for available demographics). The 21 Lab School students participating in the study made up 24% of all Lab School students in grades 11 and 12, and the 103 residential gifted school students made up 41% of all Academy students. Students in the Academy were accepted as rising 11th graders in a competitive process on the basis of SAT scores, standardized achievement test scores, courses taken, and teacher recommendations. The students in the Lab School were in the last wave of attendees who were accepted before the institution of a public lottery. At the time of their acceptance 11–12 years earlier, children of the local university faculty and siblings of enrolled students were given priority over other applicants. Although it is a public laboratory school, transportation has never been provided, leading to a student body whose parents have the means or desire to have their children attend a school that may not be near their home. In the year of data collection, 2005–2006, the Lab School population was 82% White, with 19% of students receiving

free or reduced cost lunches. The students performed better than the state average on the state's achievement tests, with 78% passing at the Lab School, in comparison to a 64% passing rate statewide. All residential school students were required to have passed the state's achievement test prior to their application. The Academy student body was approximately 300 students, including 58% female, and 60% from rural schools, 30% from urban schools, and 10% from suburban schools. Approximately 56% were White, 12% African American, 10% Hispanic, and 10% Asian American, with the remainder was not identified. Approximately 20% of Academy students qualified for free or reduced cost lunch.

Table 1
Student and Teacher Demographics

		School		
		Lab School	Academy	Total
Students				
	Male	11	42	53
	Female	10	61	71
Grade	11	3	48	51
	12	18	55	73
Total*		21	103	124
Teachers				
	Male	5	8	13
	Female	19	5	24
Degree	Bachelor's	6	0	6
	Master's	18	8	26
	Ph.D.	1	6	7
Total*		25	14	39

*Totals reflect missing data.

Instrument

Gagné and Nadeau's (1991) Opinions about the Gifted and Their Education instrument was developed during the 1980s from an evaluation of existing questionnaires about attitudes toward giftedness, comments taken from the newspapers and magazine articles, and from interviews with parents and teachers. The instrument used a 7-point Likert scale (1 = *strongly disagree*, 4 = *neither agree nor disagree*, 7 = *strongly agree*). Responses were converted to -3 to +3, with a midpoint of zero to reflect the neutral response. One item, "Average children are the major resource of our society, so they should be the focus of our attention," was dropped from analysis due to a very low response rate. Reliability

of the instrument with this sample was adequate, with Cronbach's $\alpha = .81$. In their sample of parents and teachers ($N = 339$), Gagné and Nadeau (1985) originally found six factors (Support of Special Services, Objections to Special Services, Opposition to Acceleration, Perceptions of Rejection and Isolation, Social Value, and Opposition to Homogeneous Grouping). However, in a sample of teachers ($N = 262$), a confirmatory factor analysis of this structure by McCoach and Siegle (2007) could not be achieved. Using exploratory factor analysis, McCoach and Siegle found three factors—Support, Elitism, and School Acceleration—in their random sample of teachers across the US.

Procedure

Students and teachers volunteered to participate in the study and completed an anonymous survey, either online or a paper-and-pencil version. Cases were dropped from the analysis because of missing data ($n = 6$) or because more than 90% of responses were “Neither agree nor disagree” ($n = 6$). The deleted cases were evenly split between the lab and residential school participants. Item mean substitution was used to replace the few missing item responses (0.3% of responses were replaced) in the remainder of the dataset. Item mean substitution is considered an acceptable method when few missing items must be replaced (McKnight, McKnight, Sidani, & Figueredo, 2007), as in this case.

Considering the unique sample of this study and the instability of previous factor analyses of the Opinions about the Gifted and Their Education instrument (Gagné & Nadeau, 1985, 1991; McCoach & Siegle, 2007), exploratory factor analysis was used to reduce the number of items for analysis. The many changes in gifted education since the development of Gagné and Nadeau's instrument in 1985 also suggested a need for further exploratory factor analysis. Following the suggestion of Franklin, Gibson, Robertson, Pohlmann, and Fralish (1995), parallel analysis was executed via STATA version 12.1 to determine the appropriate number of factors to retain. Six factors were identified in the data. SPSS version 19 for the Mac was used for the remaining analyses. Assuming there would be correlations among the factors, principal axis factoring extraction was used, with Promax rotation, specifying six factors as suggested by the parallel analysis.

To answer the research questions appropriately, we first examined differences between the Lab School and Academy teachers and students, but then took a step beyond these comparisons in our analysis. Clustering respondents by their responses to Gagné and Nadeau's (1991) survey allowed us to identify patterns in the data not evident from group comparisons. Cluster analysis was an effective method for determining similarities and differences in opinions about giftedness in the two schools.

Results

The analysis resulted in theoretically coherent item loadings on the 6 factors of Needs, Elitism, Oppose, Support, Acceleration, and Social Value (see Table 2). Although these factors were similar to Gagné and Nadeau's (1985) six factors, there were significant differences. The Needs factor included items about the needs of gifted students: stifled curiosity, boredom, rejection, and neglect. The Elitism factor included items regarding the negative effects of special education for gifted students: other children feel devalued, special classes are a privilege, and vanity develops from special attention. A high score on the Elitism factor indicates opposition to gifted education, but in a qualitatively different manner from the Oppose factor. The Oppose factor includes opposition to public funding for gifted services and support for the abolition of special programs for the gifted. The Support factor included items that are supportive of gifted education to meet the needs of gifted students, who are a "valuable resource for society." The Acceleration factor included items about the negative effects of acceleration such as holes in student knowledge or social difficulties. A high score on the Acceleration factor indicates opposition to acceleration. The Value factor indicated support for special services for future leaders and a desire to be considered a gifted person. Regression scores were retained for all six factors. Scale reliability for each factor is presented in Table 3.

Table 2
Pattern Matrix of Factor Loadings

	Factor					
	Needs	Elitism	Oppose	Support	Acceleration	Value
The regular school program stifles the intellectual curiosity of gifted children	.723	-.142	.016	-.003	.111	.053
The gifted waste their time in regular classes	.668	-.098	.043	-.132	.061	.244
The specific educational needs of the gifted are too often ignored in our schools	.655	.089	-.250	.244	-.104	-.226
Often, gifted children are rejected because people are envious of them	.640	.171	.137	.038	.027	-.022
Gifted children are often bored in school	.630	.102	-.236	-.142	-.054	.100
Some teachers feel their authority threatened by gifted children	.512	.229	.031	.002	-.075	-.023
A greater number of gifted children should be allowed to skip a grade	.419	-.030	.222	.106	-.417	.067

	Factor					Value
	Needs	Elitism	Oppose	Support	Acceleration	
A child who has been identified as gifted has more difficulty in making friends	.414	-.011	.302	-.087	.351	-.141
It is more damaging for a gifted child to waste time in class than to adapt to skipping a grade	.277	.047	-.171	.098	-.192	.229
Special programs for gifted children have the drawback of creating elitism	.009	.898	-.273	-.104	.087	-.027
When the gifted are put in special classes, the other children feel devalued	-.005	.629	.076	-.039	.058	.095
By separating students, we increase the labeling of children as strong-weak, good-less good, etc.	.004	.565	.107	-.026	.134	-.062
Special educational services for gifted children are a mark of privilege	.165	.465	-.011	-.168	.058	.431
Gifted children might become vain or egotistical if they are given special attention	.168	.445	.154	-.262	.112	.076
Children with difficulties have the most need of special education services	.215	.397	.239	.212	.000	-.081
It is parents who have the major responsibility for helping gifted children develop their talents	.105	.271	.098	.162	.004	.250
Taxpayers should not have to pay for special education for the minority of children who are gifted	.088	-.016	.660	-.160	-.013	.187
Our schools should offer special education services for the gifted	.110	.142	-.593	.235	-.036	.058
All special programs for the gifted should be abolished	.067	-.040	.591	-.299	-.043	-.125
We have a greater moral responsibility to give special help to children with difficulties than to gifted children	.126	.250	.548	.058	.063	.106
Gifted children should be left in regular classes since they serve as an intellectual stimulant for the other children	-.215	.369	.461	.202	-.085	-.225
Our schools are already adequate in meeting the needs of the gifted	-.309	.136	.417	.095	-.057	.228
The gifted are already favored in our schools	-.145	.369	.401	-.111	-.151	.236

	Factor					Value
	Needs	Elitism	Oppose	Support	Acceleration	
Since we invest supplementary funds for children with difficulties, we should do the same for gifted children	.162	-.127	-.336	.307	.051	.020
Gifted persons are a valuable resource for our society	-.168	.067	-.269	.749	.017	.080
In order to progress, a society must develop the talents of gifted individuals to a maximum	-.010	-.222	.030	.671	.196	.124
The gifted need special attention in order to fully develop their talents	.266	-.022	-.091	.499	.052	-.116
Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students	-.067	.166	-.235	.087	.837	.007
When skipping a grade, gifted students miss important ideas (holes in knowledge)	-.104	.075	.115	.090	.583	.181
Children who skip a grade are usually pressured to do so by their parents	.013	.046	.167	.246	.431	.184
By offering special education services to the gifted, we prepare future members of a dominant class	.004	.060	.165	.022	.125	.590
The leaders of tomorrow's society will come mostly from the gifted of today	.264	-.056	.128	.249	.067	.437
The best way to meet the needs of the gifted is to put them in special classes	.355	-.148	-.120	-.025	.001	.390
I would very much like to be considered a gifted person	.101	.060	-.067	.288	-.083	.370
Ability grouping is an effective method to provide instruction to students of different ability or skill levels	.193	-.056	-.198	.132	-.091	.298

Note. Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization.

Table 3
Scale Reliability of Factors

Scale	Cronbach's alpha	Number of items
Needs	.790	9
Elitism	.786	7
Oppose	.707	8
Support	.728	3
Accelerate	.685	3
Value	.700	5

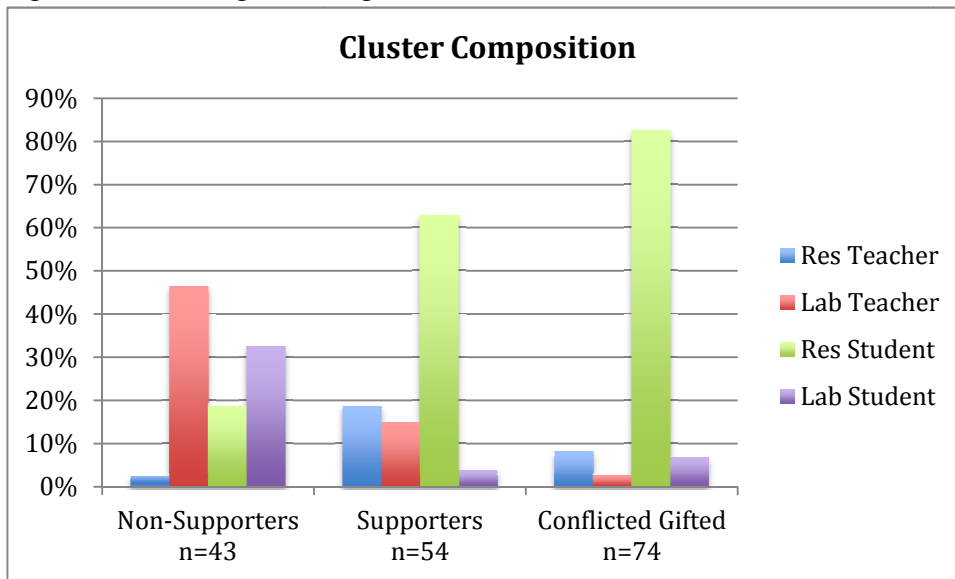
According to the Shapiro-Wilk's W test, distribution of the Elitism, Support, and Oppose factor scores was not normal for the full sample, ($ps < .05$). To identify differences in these scores among the groups, the Kruskal-Wallis nonparametric test was used with the group as the independent variable and the Needs, Elitism, Oppose, Support, Acceleration, and Value factor scores as the dependent variables. The Kruskal-Wallis test is recommended for multivariate comparison of group differences in the case of data that are not normally distributed. Four of the six factor scores were significantly different among the four groups of students and teachers from the two schools: Needs $\chi^2 = 51.70$, $df = 3$, $p < .01$; Oppose $\chi^2 = 28.37$, $df = 3$, $p < .01$; Support $\chi^2 = 29.04$, $df = 3$, $p < .01$; Value $\chi^2 = 54.47$, $df = 3$, $p < .01$. Elitism ($\chi^2 = 6.44$, $df = 3$, $p = .09$) and Acceleration ($\chi^2 = 5.32$, $df = 3$, $p = .15$) did not differ by the school and student/teacher groups.

To determine the pattern of responses among students and teachers, participants were classified by hierarchical cluster analysis, using Ward's Method with squared Euclidean distance, with the 35 survey item responses included. An analysis of various solutions found that the most reasonable number of clusters was three, based on cluster sizes and theoretical cohesion (see Table 4). Based on the means of the six factors for each cluster, we have named these the Non-Supporters, the Supporters, and the Conflicted Gifted. Figure 1 depicts the percentage of each group within the clusters and Figure 2 the medians of the factor scores for each cluster. The Non-Supporter cluster was made up primarily of Lab School teachers and students, with a few Academy students. Members of this cluster showed little agreement with the needs of gifted students and strong opposition to gifted education. They also agreed that gifted education is elitist, and they held negative views of acceleration and of the social value of giftedness.

Table 4
Cluster Composition by Group

Group	Cluster			Total
	Non-Supporters	Supporters	Conflicted Gifted	
Residential school Teacher (%)	1 (6%)	10 (59%)	6 (35%)	17
Laboratory school Teacher (%)	20 (67%)	8 (27%)	2 (7%)	30
Residential school Student (%)	8 (8%)	34 (33%)	61 (59%)	103
Laboratory school Student (%)	14 (67%)	2 (10%)	5 (24%)	21
Total	43	54	74	171

Figure 1. Percentage of categories within each cluster.



The Supporters cluster was made up primarily of Academy students and teachers, with a few of the Lab School teachers. The Supporters acknowledged the needs of gifted students to some degree and strongly supported gifted education, including its social value. They did not consider it to be elitist and did not agree that there are negative effects of acceleration. The Conflicted Gifted cluster contained a majority of the Academy students in the sample (59%) and a few residential school teachers and laboratory school students. This group was conflicted about gifted education, recognizing the needs of gifted students and the

value of giftedness, but showing opposition to gifted education. The members of this cluster agreed strongly that gifted education is elitist and that acceleration has negative effects.

Figure 2. Median factor scores for each cluster.



Because the data were not normally distributed, the Kruskal-Wallis nonparametric test was used to test differences in the scores. The cluster number was the independent variable and the Needs, Elitism, Oppose, Support, Acceleration, and Value factor scores were the dependent variables. Mean ranks were significantly different for all factors (see Table 5).

Table 5
Kruskal-Wallis Nonparametric Test of Factor Score Differences by Cluster

	Factors					
	Needs	Elitism	Oppose	Support	Acceleration	Value
χ^2	81.36	71.41	73.82	57.86	22.71	64.50
<i>df</i>	2	2	2	2	2	2
Asymp. Sig.	.000	.000	.000	.000	.000	.000
η^2	.48	.42	.43	.34	.13	.38

The same test was used for pairwise comparisons to determine which clusters accounted for the differences (see Table 6). The Non-Supporters and Supporters differed on all factors. The Conflicted Gifted differed from the Supporters on all factors, except for Value. Non-Supporters and Conflicted Gifted differed most on attitudes toward Needs and Value, with moderate effect sizes on both. They also differed significantly in their opposition to and support for gifted education, but with small effect sizes. Non-Supporters and Conflicted Gifted had similar attitudes regarding Elitism and Acceleration.

Table 6
Kruskal-Wallis Nonparametric Pairwise Comparisons of Factor Score Differences

	Factors					
	Needs	Elitism	Oppose	Support	Acceleration	Value
Non-Supporters vs. Supporters (<i>n</i> = 97)						
χ^2	55.84	39.82	52.52	43.67	18.92	40.10
<i>df</i>	1	1	1	1	1	1
Asymp. Sig.	.000	.000	.000	.000	.000	.000
η^2	.58	.42	.55	.46	.20	.42
Non-Supporters vs. Conflicted Gifted (<i>n</i> = 117)						
χ^2	59.90	1.87	6.85	18.51	.66	60.60
<i>df</i>	1	1	1	1	1	1
Asymp. Sig.	.000	.171	.009	.000	.416	.000
η^2	.52		.06	.16		.52
Supporters vs. Conflicted Gifted (<i>n</i> = 128)						
χ^2	14.46	63.38	53.08	28.48	15.31	.22
<i>df</i>	1	1	1	1	1	1
Asymp. Sig.	.000	.000	.000	.000	.000	.643
η^2	.11	.50	.42	.22	.12	

Discussion

In addition to its usefulness to school administrators, this study provides a unique perspective on attitudes toward gifted education. The special case of a residential gifted school within a regular school might have resulted in strong support for gifted education, but this study suggests a more complex situation. Due to their large numbers in both the schools and the sample, the Academy students, who have been identified as gifted and have participated in gifted programs—perhaps for many years of their schooling—could possibly have skewed the results in support of gifted education. This was not the case, however.

By using responses to the survey to group participants rather than grouping by school or student/teacher status, we gain a clearer picture of the attitudes held by both students and faculty.

Evidence of Support and Opposition

The findings of this study provide clear evidence addressing the research questions: (1) Was there support for gifted education in both schools? and (2) Were attitudes toward gifted education different among faculty and students of the two schools? Although there was support for gifted education in both schools, there was also opposition in both schools. Attitudes toward gifted education were very different among faculty and students of the two schools, with greater opposition in the Lab School and greater support in the Academy except among students.

The three clusters represent very different attitudes toward gifted education: opposition, strong support, and conflicted. The Lab School teachers in this study were general education teachers, with little or no training in gifted education. Two teachers in the Lab School felt conflicted about gifted education (see Table 4), acknowledging the needs of students and the social value of gifted education, but opposing gifted education as elitist; approximately a third (35%) of the Academy teachers likewise demonstrated this incongruity. A majority (59%) of Academy students were conflicted about supporting the needs of gifted students through what they saw as elitist programs. Even as they believed in the social value of giftedness, they opposed special services, including acceleration. The conflictual attitudes of both students and teachers immersed in gifted education indicate a possible problem for the optimal development of potential. These gifted students recognized the need to avoid boredom in the classroom, the need for a stimulating environment, and the threat and envy they engender among teachers and peers, yet they also believed that providing support to address these needs is unfair (elitist) and may be hurtful to peers by devaluing them. If such beliefs about the programs that benefit them are representative of the larger gifted population, they may cause students to choose educational options that are inadequate to meet their needs in order to satisfy their beliefs that such programs are unjustifiable.

About a third of Academy students (33%) and a majority of Academy teachers (59%) escaped the contradiction in attitudes of the Conflicted Gifted. The Supporters cluster members agreed that gifted students have unique needs and strongly disagreed that gifted education is elitist and were able to support it. A minority of Lab School teachers (27%) was supportive of gifted education, whereas most Lab School teachers (67%) and students (67%) did not see the need

for gifted education, and felt strongly that it was elitist. Such diverse opinions indicate the fractured nature of the academic culture in the school and suggest a need to address negative attitudes in any professional development, particularly the concern that an adequately challenging education that is independent of practice for general education students somehow bolsters feelings of inequity and superiority.

Mixed Messages

What might account for the three different clusters of responses? How do individuals come to support gifted education and see it as not elitist? The gifted students in this study recognized the needs of gifted students and the social value of giftedness, yet most of them did not agree that gifted students need special attention and that society cannot progress without maximal development of the talents of gifted individuals. It is possible that they believe these are true—that gifted students can achieve their maximum potential without special attention or that it is not imperative to achieve that maximum—or it may be that these students are conflicted because of their desire for fairness and equality in educational opportunities and special attention to their needs seems counter to that desire. They may come to believe the gifted are already favored, simply because they are gifted.

Coleman and Cross (2005) described at length the difficulties gifted children face in an environment that is sometimes welcoming of their exceptional abilities, but sometimes hostile. As all children may receive messages that they should “work hard,” “do your best,” and “be a high achiever,” there is a subtle undercurrent beneath these messages that is apparent to, and perhaps directed only at, gifted students. Although children should do their best, they should not excel beyond the capabilities of their classroom peers. They should not be *too* smart (Cross, 2002). Anti-intellectualism is a norm in many subsets of American society, even many academic ones (Howley, Howley, & Pendarvis, 1995). As they develop, these mixed messages become entwined in their social cognition and self-concepts. Teachers experience these mixed messages as well, and are participant to transmission of both positive and negative stereotypes of gifted students and their role in society. McCoach and Siegle (2007) reported great variability in teacher responses to the same Gagné and Nadeau (1991) instrument used in this study. The Conflicted Gifted manifest these mixed messages and may explain some of the variability in McCoach and Siegle’s sample. Somehow, not all students and teachers have assimilated these messages in the same way.

Competitive or Nurturant Schools

Schools can be conceptualized through various metaphors. If we view school as a competition to be mastered, gifted students can easily be successful. If, on the other hand, school is viewed as an environment for nurturing potential, the outcome for each student is less clear. How to maximize one's potential while attending to the nurturance of everyone else is a more socially demanding task than a competition for achievement. Academic abilities are distributed along a broad continuum. How does a system achieve maximum potential for everyone along that continuum, with equality as a primary goal? Ensuring equal opportunity in education may not appear to be just when equality of outcomes differ so greatly. This dilemma is evident among the Conflicted Gifted. One interpretation is that they are uncertain that equality of opportunity exists when gifted students receive special services. There is insufficient evidence in their experience or, one could easily argue, in the research base, to help them make this determination. Further exploration is needed to understand what individual differences in thinking or experience would lead to different attitudes toward gifted education represented by the three clusters found here: the Non-Supporters, Supporters, and Conflicted Gifted.

Implications for Professional Development

Without an assessment of student and teacher attitudes, administrators may have made inappropriate assumptions about the professional development that was needed at the Lab School. They may have assumed that everyone in the school was a blank slate regarding gifted education, prepared to absorb any training provided, or that everyone in the school was supportive or unsupportive. Traditional in-service training conducted under any of these assumptions may have been unsuccessful in gaining the support of teachers in the Non-Supporters or the Conflicted groups. A one-size-fits-all professional development model is inadequate to reach the nuanced beliefs of the various stakeholders in the Lab School. This study made it clear that the professional development designed for teachers in the two schools should include the research evidence for the unique needs of gifted students before providing information about the structure and implementation of services.

The professional development that was actually conducted was created by a subset of the faculty of the Lab School in concert with the director of the university's center for gifted education. Original assumptions about levels of support for gifted students and gifted education were rethought and everything designed had to fit within the inclusion philosophy that most of the school's faculty supported. Considerable attention was paid to training faculty to

understand how to meet the educational needs of gifted students by using flexible grouping, acceleration, college courses, and myriad other approaches available to educators. A key to the training was that the needs assessment provided a surprising level of nuance on which the training could be based. The assessment also allowed the important belief systems of faculty to be honored while research that did not always support their views was integrated.

Conclusion

The unique setting of this study, a gifted school within a laboratory school, is a microcosm of the larger environment in which gifted education exists. Gifted programs, certified teachers, and gifted students who spend years receiving services all exist in communities with much larger systems of general education. In these systems, it is likely that there will be Supporters, Non-Supporters, and Conflicted participants. School administrators at any school who plan to make significant changes in the provision of services for gifted students can benefit from the findings of this study. A needs assessment should include an examination of attitudes of the stakeholders. Armed with the results of such an examination, an informed plan can be developed for the provision of the most effective professional development.

As for the broader question raised by the Conflicted Gifted, more research is needed to understand a system that engenders such contradictory beliefs. What elements within gifted education result in a perception of it as elitist? In order to adequately serve the students who need accommodations to achieve to their potential, there may need to be changes to the way services are provided. Although conflicting attitudes have been identified in this study, there is no evidence of any harm they may or may not cause. It may be that messaging is key and attitudinal change could be fostered by stronger or different forms of advocacy. Perhaps gifted education would benefit from outreach to general education and improvement of inclusive classroom practice. Such measures may alter opinions in favor of providing services for students with gifts and talents, eliminating the mixed messages these students receive and relieving their conflicted beliefs regarding their education.

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