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Perceptions of Teachers and Students Regarding the Middle School Honors Program

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Abstract

This study examined the perceptions held by 40 teachers and 304 students regarding a middle school honors program. The sample population represented an equal number of honors and non-honors participants. Two surveys were analyzed using thematic coding for qualitative questions, while *t* test and descriptive statistics were used for quantitative results. The results confirm college and high school findings regarding the academic perceptions of the honors students, the reasons for and against their enrollment, satisfaction with the program, and the over-representation of female and white students, but reject specific identified characteristics of an honors student. Middle school honors students do not have the same qualities as high school and college honors students.

Keywords: honors program, middle school, perceptions, student qualities

About the Author(s)

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Biographical information: Selma Testa, M.A. in Community Psychology and Social Change from Penn State University, has taught at the middle school level for several years prior to conducting the research on the honors program. She advocates the use of a participatory-based research approach to improve all educational settings. Thus, she would like to thank the students and educators who made this research possible.



Current Issues in Education

Mary Lou Fulton Teachers College • Arizona State University PO Box 37100, Phoenix, AZ 85069, USA The number of middle schools in the United States that have adopted an honors program has increased, yet research on the programs at this level has lagged behind. The need for research specific to middle school honors programs is imperative due to the social, physical, and mental developmental differences between the adolescent student and the collegiate student on whom current honors program research centers. School districts using an honors program, or, those considering its use, need information regarding the middle school honor students' characteristics to better facilitate the proper selection of students for the program. The purpose of this study is to close the gap in research into middle school honors programs and then compare those research findings with existing research done in high schools and colleges.

An honors program is a planned set of experiences through which the academic needs of talented and able students are better served than they can be within the regular classroom (Halverson, 1973). It is used by schools as a means for encouraging and challenging the high-achieving student. Research has focused on collegiate honors programs. Herr (1992a) point out a lack of such studies on high school honors programs within the United States. Middle school honors programs have received little attention from researchers, and are only occasionally included in tracking studies. This study looks at the differences between honors and non-honors middle school students as perceived by the students and their teachers as well as on the honors program.

Literature Review

College Level

In a survey of 19 collegiate honors programs, McKeauge (1984) found that 88% required more reading and discussion, 81% more writing, and 75% stressed a higher level of critical thinking than the equivalent non-honors classes. In 1994 the National Collegiate Honors Council

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developed guidelines for "Basic Characteristics of a Fully Developed Honors Programs" to enable more consistent programming in higher education.

When first semester college students were asked about their expectations of the honors college, they stated that these included challenge, honors housing, good professors, special advisement, relationships with other honors students and professors, and personal recognition (Christopher, 2005). Participants interviewed for this case study reported that the honors college met their social, emotional, and academic needs. In one of the earliest studies of perceptions of honors students, as rated by their non-honors peers, Waggoner (1963) found that honors students were characterized as more intellectual, studious, thorough, precise, accurate, persistent, industrious, logical, responsible, orderly, and capable: All of which are traits of successful students. Socially, they were found to be self-confident, alert, mature, stable, dependable, economical, friendly, sympathetic, tolerant, charming, and less sloppy. Negatively they were described as unimaginative, reckless, unreliable, implosive, inept, egotistical, fault-finding, moody, sarcastic, argumentative, lonely, nervous, rigid, annoying, more critical, and less humorous than non-honors students.

When looking at the long-term effects that honors programs can have on students, studies have examined the performances of these students while in colleges. Even students who were placed into an honors program for just their first two years of college showed drastic differences in career ambition in comparison with students who were not in such a program (Rinn, 2005). When the academic achievement, aspirations, and self-concepts of gifted college students enrolled in an honors program were compared with those of gifted students not enrolled in an honors program, Rinn (2007) found that honors students exhibit both higher academic achievement and higher academic self-concept than their non-honors counterparts. College

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students in an honors program perform better on tests of critical thinking, mathematics, and composite cognitive development (Seifert, Pascarella, Colangelo, & Assouline, 2007).

In 2005 George Mason University's study administered The Cooperative Institutional Research Program Freshman Survey to 1,709 freshman students and found that the differences between the honors students and their non-honors counterparts to be higher grade point average (GPA) and less need for remedial work during high school (Gentemann, Zhou, Zamon, & McShery, 2006). In addition, the honors college students rated their personal qualities as being more driven to achieve; higher in academic, mathematical, and leadership ability, in writing, and in public speaking, than their non-honors peers. While, honors students rated themselves as higher in intellectual self-confidence, they rated themselves lower in cooperativeness and social self-confidence. Mason's honors freshmen reported that improving their understanding of other countries and cultures was their top aspiration, while non-honors freshmen reported that being very well off financially was their top priority. Non-honors freshmen rated being in charge of others, being well off, and becoming a successful entrepreneur more highly than the honors college students (Gentemann, et al., 2006). College level research generally focuses on the implementation of the program in colleges, selection of students into an honors program, shortterm evaluation of the program, and the perceptions of students and teachers regarding the program.

High School Level

Many high schools have adopted honors or advanced classes, the latter being presented as Advanced Placement Courses (AP), dual enrollments, or International Baccalaureate (IB) Programs. Over 50% of high schools in the U.S. offer either honor programs or advanced placement courses (Mansfield & Farris, 1992). A lack of research into the honors courses in the United States' high schools has been reported by Herr (1992a).

Some research has been done on this area: In 1992, Kulik & Kulik showed that the participation and discussion that occurs in honors courses are much higher than that occurring in a regular, non-grouped classroom. In examining high school English classes, Gamoran (1986, 1992a) found that honors classes include more reading of classic literature, more writing assignments, and greater participation of students in class discussions about the literature than non-honors classes. Science teachers of honors classes report that these classes offer them the chance to work with students who are more stimulated and creative than those in regular classes; in addition, the teachers have an opportunity to learn more from these students (Herr, 1991, 1992a, 1992b). Researchers also found that higher track teachers are more involved in preparation and tend to be more enthusiastic (Oakes, 1991; Rosonbaum, 1976). In foreign language honors classes, students participate more in communication activities than they do in regular classes (Morris, 2005). Teachers hold honors students to higher expectations of maturity, ability, and motivation (Morris, 2005). These findings are supported by numerous studies on tracking. Tracking studies found that the higher tracked honors classes promote more independence and self-expression among students (Oakes, 1985; Oakes, Gamoran, & Page, 1992). Overall, a national survey of 10th to 12th graders showed that academically tracked students, which includes honors and advanced streams, tested higher for vocabulary than students in general classes (Gamoran, 1987). Although tracking studies provide some insight into honors classes, comprehensive research is lacking about high school honors programs, forcing school districts to rely on the collegiate findings when creating honors programs for high schools.

Middle School Level

In middle schools, students must be trained for AP and IB classes if they are to become successful in these courses in high school. Some schools use names such as *pre-AP*, *academic plus*, or *acceleration track* to group students together, while others use the term *honors program* to meet the needs of top students. These students typically score *advanced* or *proficient* on their grade-level standardized tests and excel academically within the regular education classroom. In honors programs, students tend to be grouped with peers of higher ability and motivation, so that enrichment and acceleration can occur. Students face an increased set of demands in these honors classes, and they may also be asked to participate in special projects, field trips, college trips, and individual research projects. Since there are no national regulations for these programs at the middle school level, each district is free to design its own version of the program. Usually, these programs are styled after the collegiate model of forming honors sections from regular classes.

The Massachusetts Department of Education measured the initiatives for academically advanced students and found that the subject of advanced instruction mirrors the subject matter of regular K-8 classrooms, with greater emphasis on mathematics and reading (Driscoll, 2002). However, in grades six to eight, students who are academically advanced are just as likely to receive advanced instruction through differentiated instruction within a heterogeneously grouped classroom as through separated advanced and accelerated courses (2002).

Even in a heterogonous middle school classroom, taking advanced mathematics showed positive correlation with higher career earnings later in life (Rose & Betts, 2004). Research into a mathematics pre-algebra course in Missouri Junior High School indicates that placement of average 8th grade students into a higher track improves these students' scores on the Comprehensive Assessment Program Achievement Series Test more than being in a regular mathematics class (Mason, Schroeter, Comps, & Washington, 1992). In addition, more of these students enrolled in advanced mathematics courses in high school. Even average achievers benefited from being placed in higher achieving classes and were 91% more likely to complete a two-year sequence of preparatory college mathematics courses in high school (Gamoran, Porter, Smithson, & White, 1997).

Research based upon a six-year longitudinal study in mathematical acceleration, comparing honors and non-honors students from 7th to 12th grade, showed that being in the accelerated program made a greater difference to non-honors students than it did to honors students (Ma, 2003). The research showed that regular students benefited the most from having algebra earlier in middle school (Ma, 2005). This type of study needs to be conducted in other subjects, especially in a comparison of honors and regular students, to validate the existence of the honors programs in middle schools. Since acceleration and enrichment are the primary characteristics of the honors program, their effect on all students should be tested to improve the overall standard of education.

Adolescent Development

Adolescence is characterized by drastic developmental changes that occur to individuals including physical, emotional, psychological, and social changes. Early adolescence occurs between ages 12 to 15, where the growth spurt occurs. This is a time where the effort to define the self is the primary personality issue (Erikson, 1968). Adolescents have trouble with these changes and may feel uncomfortable and self-conscious because of their inability to adjust to these rapid changes, so they turn to peers as a source of emotional support and acceptance.

Understanding the appropriateness of developing honors programs in middle schools is critical, due to the extreme vulnerability adolescents' face while searching for identity (Kelly, 1990).

In early adolescence emotional development, feeling may override reason due to immature brain development, thus leading to poor choices (Yurgelon-Todd, 2002). At this stage of development the frontal cortical system, which deals with motivations, impulsivity, and addiction, is underdeveloped. This may help to explain why so many adolescents have trouble focusing on long term goals, and choose thrill seeking behaviors (Bjork, Knutson, Fong, Caggiano, Bennett, & Hommer, 2004; Chambers, Taylor, & Potenza, 2003). Thus, their perceived personal characteristics may reflect differently than the college students' characteristics.

At the psychological level, adolescents enter a formative stage of development, according to Piaget (1972), which is characterized by the ability to think abstractly. Learning vocabulary and other aspects of language improves in adolescence, and at this stage, hypothetical-deductive reasoning occurs where the adolescent has the ability to develop, consider and test hypotheses (Piaget, 1972). Elkind's (1984, 1998) research found adolescent immaturity in six areas of psychological development. First, idealism and criticalness in their thinking leads them to become super conscious of hypocrisy as they find faults in everything. Second, apparent hypotrisy leads them to believe that there is no difference between ideals and reality. Third, indecisiveness is another characteristic of adolescents as they come up with many alternatives, yet lack ability to choose an effective one. Fourth, argumentativeness occurs where adolescents look for opportunities to show their reasoning abilities during an argument. The fifth characteristic is self-consciousness; adolescents are so preoccupied with their own thinking, that they assume everyone else is thinking the same thing. In addition, they seem to think that there is an imaginary audience concerned with their thoughts and behavior. The sixth characteristic is specialness and invulnerability, where the adolescents think of themselves as unique, special and exempt from following rules, which explains why they take more risks. Due to these immaturities within their psychological development, honors program participation may not have the same effect on adolescents as it does on the college students.

Research has been so focused on college level honors programs that the middle school and high school students, who are at a lower developmental level from college students, are placed into these classes without research support. To accept collegiate honors programs research and apply it to middle schools, perceptions of the honors students, as compared to the regular students, should be similar to college students in terms of academic ability, learning habits, and aspirations. The college honors students tend to rate higher in all of these areas by their own self-reporting, so the assumption is that this will occur at the middle school level. Thus, the purpose of this study was to examine the characteristics of the middle school honors students and to compare them to the non-honors students. In addition, this study will report the perceptions regarding the middle school honors program as experienced by teachers and students both in and out of the program.

Method

This study was conducted using a survey of teachers and students in four middle schools, which was designed to measure the perceptions of participants in and out of the middle school program that was implemented during the 2007-2008 school year in a school district located in south central Pennsylvania. The research used surveys of the students who were attending the middle school in the district and teachers who taught these students. The study was conducted in a racially diverse urban district located in south central Pennsylvania with 11,761 students, and

four middle schools. The number of honors students in each middle school grade level was approximately 25% of all students. The honors program was in its first year of development in this district.

Participants

There were multiple informants involved in this study. First, data were collected from seventh and eighth grade students inside and outside of the honors program. Second, teachers in and out of the honors program were also surveyed. All students in seventh and eighth grade had a chance to participate in the study, however since about 25% of the students were enrolled in the honors program, a random sample was drawn of non-honors students based on the number of completed surveys by the students in the honors program.

The teachers selected for this study were honors teachers in the middle schools. Currently only two honors classes were offered at the middle school level, Communication Arts classes and Social Studies classes, with a total of 24 teachers teaching these classes. Therefore, teachers who taught the honors students, and the same subject teachers who did not teach the honors students, were compared.

Instrument

The closed questions survey was based on the Cooperative Institutional Research Program's (CIRP) college freshman survey, which is a part of a national longitudinal study established in 1973 by the American Council on Education in Higher Education Research Institute (1966). However, some of the wording was adjusted accordingly to match the psychological development of the adolescents. Synonyms from a thesaurus were used to simplify vocabulary unfamiliar to the middle school students. The teacher survey contained open-ended questions and quantitative questions. Due to the lack of an existing testing instrument, the openended questions were designed by the researcher. The survey was designed with a quantitative item to triangulate results between groups.

This CIRP Freshmen Survey had been tested and used in over 700 college evaluations of honors programs in the last 40 years. The reliability of the survey instrument performed by HERI and repeat participation was at about 90 percent. The confidence interval means, if replicating the survey using the same size sample, the expected resulting percentage would fall between 18.3 percent and 19.1 percent 95 times out of 100. For the sample of 500 participants, the estimated standard of error at 99% is .445. To calculate the validity of the instrument, Austin (1991) found the scale reliability coefficient exceeded .70.

Procedure

The data were analyzed using the thematic coding method for any commonalities and differences between honors and non-honors students who participated in the study. Statistics were used to describe responses as pertaining to themes. Data from open-ended student responses and teacher surveys were analyzed by a consistent comparative method of analysis (Glaser & Strauss, 1967). This method involves reviewing all responses for descriptive categories and refining each category by seeking examples until no new information emerges (1967). This is called the saturation of the category. Moustakas' (1994, p.122) seven steps of analysis were used to guide the researcher through this type of analysis.

For the quantitative portion of the survey, coding developed by the researcher was similar to HERI analysis and entered into Statistical Package for the Social Sciences, which is a program used for analysis. Specifically, *t* test was used to evaluate the difference between honors and non-honors participants along with mean, standard deviation, and variance for each quantitative item. The independent variable included honors or non-honors placement.

Results

Description of the Sample

Teachers participating in this study were divided into two groups: an honors teaching group and a non-honors counterparts group, which served as the comparison sample totaling 40 participants. The number of student participants in the survey was 304; half were enrolled in the honors program and the other half were not. The student demographics include gender, grade, school, age, language, grade point average, race, remedial needs, honors program interest, and parents' level of education.

Based on the responses provided, noticeable differences exist in the grade point average, which is higher for honors students. The percentage of honors students who had an A or B average amounted to 87.7%, compared with 65.2% of non-honors students with the same average. Significant differences between the two groups were also noted in the racial background: Caucasian (37.5% to 21.7%), Asian American (6.6% to 1.3%), and other students (9.9% to 5.3%) as participants in the honors program, while there were fewer African American (17.8% to 27.6%) students participating in the district's program. More non-honors students needed remedial assistance overall in the areas of reading (15.1% to 7.9%), mathematics (37.5% to 23%), and science (14.5% to 3.3%), while honors students stated that they needed more help in English (9.25 to 3.9%). The parents of honors students had higher education overall than the parents of non-honors students. The percentage of mothers who held educational credentials beyond high schools totaled 55.3% for honors and 36.9% for non-honors students, while 44.7% of honors students' fathers held these credentials, as compared to 24.2% for the non-honors group.

The Differences Among the Honors Students' and Non-honors Students' Personal Qualities

The students were asked to rate their qualities as compared with the average person their age. The Likert Scale was used to determine whether the students felt they were at the lowest 10% of their age group, below average, average, above average or in the highest 10%. The qualities included academic ability, artistic ability, competitiveness, computer skills, cooperativeness, creativity, motivation to achieve, emotional health, leadership ability, mathematic ability, physical health, public speaking ability, intellectual self-confidence, social self-confidence, self-understanding, spirituality, understanding of others, and writing ability. The *t* test, used to determine the level of significance between the self-reported ratings of honors and non-honors students, found academic ability, artistic ability, computer skills, cooperativeness, creativity, motivation to achieve, emotional health, leadership ability, mathematical ability, physical health, and intellectual self-confidence to be higher in the honors students' ratings, as shown in Table 1.

Та	ıbl	le	1

Quality	Mean	t	df	р
Academic ability	H-4.17 NH-3.59	-5.518	302	0.000
Artistic ability	H-3.40 NH-3.14	-2.082	302	0.038
Computer skills	H-3.86 NH-3.59	-2.251	302	0.025
Cooperativeness	H -4.09 NH-3.66	-3.656	302	0.000

Self-reported Differences Between Honors and Non-honors Students' Personal Qualities

Middle School Honors Program Perceptions 15					
Creativity	H-4.26 NH-3.88	-3.497	302	0.001	
Motivation to achieve	H-4.41 NH-3.88	-5.058	302	0.000	
Emotional health	H-3.96 NH-3.63	-2.603	302	0.010	
Leadership ability	H-4.14 NH-3.86	-2.416	302	0.016	
Mathematical ability	H -4.13 NH-3.33	-6.390	302	0.000	
Physical health	H-4.14 NH-3.82	-2.734	302	0.007	
Intellectual confidence	H-4.34 NH-4.09	-2.358	302	0.019 self-	

Note. Means (M) for honors students were represented with H, and for non-honors students with NH.

Academic ability for the honors students had a mean rating of 4.17, which was above average, while non-honors students had an average score of 3.59. In artistic ability, both groups were average, with honors being at 3.40 and non-honors only slightly lower at 3.14. Honors students were average to above average in computer skills, while non-honors students rated slightly lower. Creativity was rated at 4.26, which is above average, for honors and at 3.88, average to above, for non-honors. Similarly, in motivation to achieve, the mean of the honors students was 4.41, which was also well above the average, while the non-honors fell between an average and above average rating. Leadership ability was above average for honors students (M=4.14), while being average to above for the non-honors (M=3.86) group. The mean in cooperativeness for honors students was 4.09, which was above average, as compared to an average of 3.66 for non-honors students. The largest difference in qualities between the two groups was in mathematical ability, with the mean of the honors students at 4.13 and the non-

honors at an average level of 3.33. Even in physical health, the honors group rated themselves as above average (M=4.14), while the non-honors group (M=3.82) was slightly behind. The last significant difference in personal qualities was in intellectual self-confidence, where both groups were above average with honors at 4.34 and non-honors at 4.09 rating. A significant deference between the two groups for other qualities was not shown.

Next, students rated their learning habits within the last school year to determine whether there were any significant differences between the two sample groups in asking questions in class, supporting opinions with facts, seeking solutions to problems and explaining them to others, revising papers, taking a risk, seeking solutions, researching topics on their own, accepting failure as part of learning, and asking for feedback on schoolwork. Honors students self-reported their tendency to support their opinions with facts more often than the non-honors students' reporting (t=-3.568, df=302, p<0.000), while all other learning habits were similar.

Measuring hours per week spent outside of schools on various activities by students, the differences were found in studying and homework (t=-2.725, df=302, p<0.007), partying (t=2.952, df=302, p<0.003), participating in student clubs (t=-3.272, df=302, p<0.001), reading for pleasure (t=-2.418, df=302, p<0.016), and participating in online social networks (t=3.287, df=302, p<0.001). The honors students spent 3 to 5 hours a week on studying and homework, while non-honors spent 2 to 3 hours. The honors students' mean for student club participation was 2.17, which amounted to over 2 hours, as compared to a mean of 1.40, which amounted to less than 1 hour per week for the non-honors students. Reading for pleasure amounted to between 2 to 3 hours per week for the honors and almost 2 hours for the non-honors group. Participating in online social networks was very popular for both groups of students, with honors students spending from 3 to 5 hours and non-honors students spending 6 to 10 hours per week

enjoying this activity. In each of these activities, the non-honors students surpassed the honors students in the amount of time they spent on leisure activities, while the honors students spent more time on schoolwork-related activities. Other leisure activities, including socializing with friends, performing household duties, exercising, playing video games, and watching television, were not significantly different between the two groups. In addition, there were no differences reported on time spent on schoolwork-related activities including talking with teachers outside of class and volunteering.

Looking at the aspiration goals, there were differences between importance of being skilled in their future career and becoming successful in a business of their own. All other goals, including becoming respected in a future career, raising a family, being wealthy, being in charge of others, helping others, creating original works, cleaning environments, promoting racial understanding, and understanding other cultures, were similar for both groups. The honors students rated higher the importance of being skilled in their future careers (t=-2.410, df=302, p<0.017), while non-honors students expressed that being successful in a business of their own was more important to them personally (t=3.154, df=302, p<0.002). Honors students believed that becoming skilled (M=2.76) in their future career was very important and even necessary, but the non-honors students thought becoming skilled (M=2.60) was important, but not as necessary. Being successful in a business of their own (M=2.44) for non-honors students was very important for honors students.

Honors Students' Perceptions of the Honors Program

Based on the responses provided by the honors students, 74% decided to enroll in the program due to their desire to learn and be challenged beyond the regular classroom. The students believed that the program would help them prepare for honors and AP classes in high school and college (14%), and some felt that the program would benefit their future (18%). In

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reference to the question regarding the importance of doing well in school, the majority of the honors students (98%) valued education due to the belief that it will benefit them in the future. One student summarized his thinking as, "I believe that education is very important because my parents work very hard to have food on the table, and I see them wanting a better life for me and my sister. I also want to support them when they get old and can't support themselves." A small group of students (7%) were encouraged by their parents to join the program, and 6% were placed in the program by a teacher or an administrator and actually not aware of the program at first. Other responses included a desire to be in advanced classes with students who want to succeed, or to be in classes with friends.

According to the honors students in the survey the perceived benefits of the program included challenge (40%), higher level of learning (30%), preparation for the future (23%), special activities (17%), being a part of a great program (13%), higher level of teacher support (8%), and friendships with better students (4%). The negatives expressed by the students enrolled in the first year of the program included too much work (49%), pressure from higher expectations (17%), too much of a challenge (28%), unmotivated peers (7%), disorganization (5%), friendship with students who feel negatively about not being in the honors program (3%), boring teachers (3%), and being labeled as nerds (1%).

Non-honors Students' Perception of the Honors Program

The students who were not in the honors program described their feelings about the program very similarly to the honors students. Non-honors students decided not to enroll in the program due to 41% not being ready for the challenge, 15% applied but did not get in, 14% believed that their grades were too low, 9% were not aware of the opportunity that existed, 5% liked their regular classes, 3% believed it was too nerdy, 3% were too busy for extra work, and

1% believed that the students in the honors program were elitist. Eighty percent of these students also expressed that education was very important, 14% believed it somewhat important, and 3% claimed it was not important. The non-honors students did saw positives of the honors program, which included learning at a higher level (34%), preparation for high school and college (24%), special activities, which include projects, privileges, field trips, and extra support (18%), smart peers (8%), higher expectations (7%), and recognition (3%). The negatives expressed included more work (33%), increased work difficulty (26%), superiority (10%), stress (5%), boredom (3%), and a difficult adjustment to a faster-paced work environment (3%).

Perceptions of Honors and Non-honors Students by Their Counterparts and Each Other

Most non-honors students (49%) ranked themselves as average for their section or above average (41%), but believed that the honors students were higher in academic ability. Eighty-two percent of the students believed that the honors students were higher in academic ability, intelligence, motivation, and social skills, while 16% believed they were average in all categories. Twenty-two percent of non-honors students believed that in spite of being in honors, the honors students' social skills were not above average, 4% believed they were elitist, and 4% saw them as smart and hardworking. Other labels expressed included fast thinkers, overachievers, and nerds.

Honors students compared themselves as average (60%) or above average (34%) in their honors class. Seventy-six percent saw themselves as higher than an average student in academic ability, motivation, intelligence, and social skills, and 18% claimed they were average. Eleven percent saw their peers' within the honors group as not having higher social skills than an average student, in spite of the higher characteristics in motivation, intelligence, competition, and responsibility.

Teachers' Perceptions of the Honors Program

Teachers supported the honors program due to the need to challenge students who need and want the challenge; it tapped into creative and enriching opportunities for students; it prepared students for high school; it raised the bar across all levels; and it was rewarding to both students and teachers. When asked about having an honors program specifically at the middle school level, 16 (80%) honors teachers agreed it was beneficial for all students, and 4 (20%) sixth grade teachers stated that it should be implemented in 7th grade, after a strong foundation building, including study habits, work habits, and organization in sixth grade. Non-honors teachers had similar answers, with 17 (85%) supporting the program's existence at the middle school, and 3 (15%) opposing it due to tracking that occurs within the program. Challenging work, preparation for high school and in-depth study of topics were mentioned most frequently as the benefits of the program by teachers. Additional benefits for honors students participating in the program included a higher level of work, enriching opportunities, creativity, higher expectations, respect, developing a work ethic, having an academic peer group, and not being slowed down by standardized tests or less proficient students. The disadvantages mentioned most frequently included stress from a higher workload and an elitist attitude that may come with the honors label. Other disadvantages for honors students, included lack of flexibility in scheduling and choosing of honors classes, failing students, perceived entitlement, and large class size. The strengths for teachers in the honors programs included creativity, a challenging curriculum, interest level, supportive parents, inspiring students, higher levels of participation, access to materials, training, student achievement, and collaboration with other honors teachers. The weaknesses for teachers were large classes requiring multiple curriculum preparations, unmotivated students, various levels of student abilities, keeping true to the honors expectations,

a higher level of pressure, lack of curriculum, and lack of input in the program's decision making.

Honors Students' Characteristics (Ideal versus Real)

Identifiable expectations for the characteristics of honors students were brought into the middle school level. When teachers were asked how they view an ideal middle school honors students, their responses were recorded in by the frequency mentioned. Most teachers mentioned that higher academic, learning, and personal abilities should be present in honors students.

Academic ability was expected to be average to above average in reading and writing. In addition, the honors students needed to have high grades, complete assignments, use higher levels of thinking, seek challenges, and to perform to the best of his/her ability. They were expected to be competent, independent and quick learners, as well as, show high interest and high performance on standardized tests. The ideal honors student's learning goals needed to be higher; also, the student should be an intrinsic learner who was motivated to learn, be involved in class, helpful, goal-oriented, and willing to struggle to learn. Personal habits desired in the honors student by teachers included valuing learning, staying on task, meeting deadlines, having higher study skills, and completing homework. Teachers described an ideal honors student as hardworking, competitive, creative, organized, prepared, considerate, responsible, disciplined, diligent, cooperative, and intrinsically motivated.

Next, the teachers rated their average honors student's qualities as compared to the average non-honors student their age. The Likert Scale was used to compute their answers with means reported for honors and non-honors teachers' responses. The score of 1 meant that the students were in the lowest 10% of their grade, 2 meant below average, 3 was average, 4 above average, and 5 highest 10% of the grade. Both the honors and non-honors teachers rated the honors students in their building similarly, as shown by the means (M) in Table 2.

Table 2

Rating of Honors Student's Qualities as Compared to a Non-honors Student in the District by Teachers and Honors Students

Variable	Non-honors teachers' M	Honors teachers' M	Honor students' M	Non-honors students' M
Academic ability	4.2	4.35	4.17	3.59
Artistic ability	3.39	3.45	3.40	3.14
Competitiveness	4.05	3.85	3.77	3.66
Computer skills	3.83	4.05	3.86	3.59
Cooperativeness	4.0	4.1	4.09	3.66
Creativity	3.65	4.1	4.26	3.88
Drive to achieve	4.37	4.1	4.41	3.88
Emotional health	3.72	3.8	3.95	3.64
Leadership ability	3.94	3.9	4.14	3.86
Mathematical abilit	xy 4.19	4.05	4.13	3.33
Physical health	3.27	3.55	4.14	3.82
Public speaking	3.67	3.9	3.54	3.53
Self-confidence (intellectual)	4.22	4.15	4.34	4.09
Self-confidence (social)	3.65	3.95	4.23	4.22
Self-understanding	3.82	3.75	4.13	4.11
Understanding of others	3.63	3.8	4.24	4.1
Writing ability	4.32	4.1	3.89	3.9

Based on the rating of the honors students by honors and non-honors teachers, academically related characteristics, including writing ability (M=4.32, M=4.1), mathematical ability (M=4.19, M=4.05), computer skills (M=3.83, M=4.05), intellectual self-confidence (M=4.22, M=4.15), and academic ability (M=4.2, M=4.35), had scores that were close to or well above average. Social skills, including understanding of others (M=3.63, M=3.8), social selfconfidence (M=3.65, M=3.95), public speaking ability (M=3.67, M=3.9), leadership ability (M=3.94, M=3.9), competitiveness (M=4.05, M=3.85), and emotional health (M=3.72, M=3.8) were only slightly above average for their age group. Personal habits, including physical health (M=3.27, M=3.55), creativity (M=3.51, M=4.1), and artistic ability (M=3.39, M=3.45), fell between average and above average with the exception of cooperativeness (M=4, M=4.01) and drive to achieve (M=4.37, M=4.1), which rated above average for honors students. In general, honors students were lacking superior characteristics that teachers expect from the honors students, which were shown very similarly by both the honors and non-honors teachers' scores. However, the honors students rated their physical health (M=4.14), social self-confidence (M=4.23), self-understanding (M=4.13), and understanding of others (M=4.24) as being above average for their age group, which was higher than teacher perceptions. Non-honors students' ratings of themselves were shown in comparison to the honors students, with significant differences (P<0.005) shown in academic ability, artistic ability, computer skills, cooperativeness, motivation to achieve, emotional health, leadership ability, mathematical ability, physical health, and intellectual self-confidence, which was explained in Table 2. All other characteristics were rated as a non-significant difference between honors and non-honors students in self-reporting.

Furthermore, the honors teachers compared the honors students they taught to non-honors students in their classes, and results showed similar findings. The greatest differences appeared in the work ethic and higher level thinking that honors students were able to express. An honors teacher explained:

They seem to have entered into abstract thought (many of them) and they are very aware of their own world. They seem to have a sense of right and wrong and can give rationales for why they think what they think. So overall, they seem to be critical thinkers, better writers, and better readers.

Most teachers reported that even though their honors students are capable of high performance, many at the middle school level seemed to lack habits of personal responsibility and motivation. This was indicated by teachers of the honors students:

Most are average, as far as being independent learners, with not accepting responsibility for completing work. They are more concerned and aware about grades, but some seem to be okay with getting a C in the class; learning goals for most are a little above average; they are more focused on how things today will affect their future (long term goals); and academically, they are higher than regular students.

Overall, the honors students tended to be stronger academically than the regular students; however, some were unmotivated. Honors teachers focus more on enriching opportunities instead of remedial reading and writing skills, since most students in the honors classes are reading on their grade level. As explained by an honors teacher: "Students are more willing to interact and have discussions with peers they are not friends with. They are more focused and on-task. They have already mastered eligible content, so higher order thinking is at the forefront." Teachers stressed that mastery of background knowledge makes teaching more enjoyable and rewarding. Teachers' were able to dive deeper into content, without having to slow down, as explained by this honors teacher:

I include less time for guided teaching (reading, note-taking, review) and more time for supplemental content (more connections to modern day, more projects, and more discussion). I require considerably more work. The climate tends to be more work- focused, though there are two significant behavior problem students who bring down the class climate.

Also, the honors students were slightly more mature socially, which made the class climate more conducive to learning due to fewer disinterested and disruptive students. Yet, personal habits left more to be desired from these students and should be addressed in the middle school curricula.

Discussion

This study provides an overview of the middle school honors program in a district located in south central Pennsylvania following its first year of implementation. The study confirms that the middle school honors students' characteristics differ from college students in social skills and maturity. In this middle school study, the general perceptions of an honors program were similar to college level findings. The benefits of the program are experienced by both teachers and students enrolled in the program, and the honors classes are perceived as more challenging than non-honors classes. Middle school honors teachers report the use of more discussions, projects, and exploration of in-depth content through more challenging materials in their honors classes, as opposed to their regular classes. This is consistent with Kulik and Kulik's (1992) findings in high schools and McKeauge's (1984) finding in colleges. Ideally, in the middle schools, teachers have higher expectations of maturity, ability, and motivation for honors students, which is reported by Morris (2005) for high schools as well; however, the reality for the middle school is different. The honors students in this study are perceived higher academically and in motivation by teachers and students, but not in maturity. An inference that the middle school student does not necessarily increase in maturity, simultaneously with their increase in academic ability and motivation, can be drawn from the responses of the teachers and the students in this study.

Cohen's (1985) evaluation of the college HP found that faculty and students benefit from honors classes by having minimal commitment, smaller class sizes, increased exposure to higher ability students, and overall satisfaction. In middle school, teachers are satisfied with the program and are exposed to higher ability students; however, their commitment is higher due to an increased amount of work and lack of curriculum. In addition, the class size is much larger than in their non-honors classes. Most middle school honors students wanted the increased level of work that the program offers; however, their commitment to the program may be lower due to the lower social maturity of the middle school students. They may desire to do well; yet controlling their impulsiveness may prove to be more difficult, thus reflecting in decreased performance at school.

Even within the first year of the implementation, there are noticeable differences in students who take the opportunity that the program offers. Darity et al. (2001) found that a majority of high school students decline placement in honors courses due to a lack of willingness to work hard and conflicts with class schedules, extracurricular activities, or employment. The middle school students have some similar reasons, including not being ready for the challenge and time conflicts; in addition, they believe that their grades are too low, some were not aware of the opportunity, some like their regular classes, several believe HP is too nerdy, and a few report that the students in the honors program are elitist. As the program becomes institutionalized and more students learn about it, it would be interesting to reevaluate this finding.

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From the honors teachers' responses in teaching differences for the honors classes as opposed to their non-honors classes, the honors classes receive more projects, discussions, and in-depth content. Even if the standard curriculum is lacking, the teachers make modifications for their honors students in order to challenge them further than the regular class allows, which is the objective of the HP. From this finding, it can be concluded that teachers know the goals of the program, and even without the support they need, they feel obligated to accommodate their honors students by providing them with higher educational opportunities that mirror their increased academic abilities.

The middle school honors students think that doing well in school is more important, have higher overall grade point averages, and have higher-educated parents. The students who choose to enroll in the program do so because they feel the need to be challenged at a higher rate than is offered in a regular classroom, and believe that the program will help in preparing them for honors and advanced placement classes in high school, and, eventually in college, which are the goals of the HP. They also believe that the program will expose them to better teachers and peers and offer more recognition. The first semester college student's expectations of the honors college were identical to the middle school expectation of the HP, except, of course, in housing (Christopher, 2005). The expectations of the honors programs seem to be carried down from college and high school to middle schools.

Rinn (2007) found that gifted honors students have both higher academic achievement and higher academic self-concepts than their gifted non-honors counterparts. There were no differences in the aspiration of these college students. This study, however, found academic achievement and grades to be higher in middle school honors students, as pertaining to academic self-concept in areas of academic ability, artistic ability, computer skills, cooperativeness, creativity, motivation to achieve, emotional health, leadership ability, mathematical ability,

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physical health, and intellectual self-confidence. In this self- reported study, middle school honors students reported higher in the belief that doing well in school is very important. With aspiration, the difference was found in honors students' desire to be skilled in their future career, as opposed to non-honors students' desire to succeed in their own business.

In The George Mason University's (2005) study, which used the same quantitative survey questions as this study, the major difference was that the honors students had a higher GPA and needed less remedial work in high school than their non-honors counterparts. This holds true for the middle school honors students as well. Mason's honors college students rated their personal qualities as more driven to achieve, higher in academic, mathematical, writing, public speaking, and leadership ability than its non-honors peers. This finding was confirmed for motivation to achieve, academic ability, leadership ability, and mathematic ability for the middle school honors students. In addition, honors college students rated themselves as higher in intellectual self-confidence and lower in cooperativeness and social self-confidence (Gentemann, Zhou, Zamon, & McShery, 2006).

GMU honors freshmen reported that improving their understanding of other countries and culture is their top aspiration goal, while non-honors freshmen reported being very well off financially is their top priority. Non-honors freshmen rated being in charge of others, being well off, and becoming successful in a business of their own, as higher than the honors college students (Gentemann, et al., 2006). Besides becoming successful in a business of their own, these personal goals are different from the goals of the middle school students in this study.

When comparing the perceptions of the college honors students as rated by their nonhonors peers, Waggoner (1963) found that honors students were characterized as more intellectual, studious, thorough, precise, accurate, persistent, industrious, logical, responsible, orderly, and capable, all of which are traits of successful students. Comparing that to responses provided by middle school non-honors students, honors students were described as being higher in academic ability, intelligence, motivation, social skills, and critical thinking. Other labels used are elitist, overachieving, nerdy, and hardworking, which is consistent with general pattern of Waggoner's findings.

However, with regards to socialization, the responses of both honors and non-honors students were not as similarly favorable, with many students believing that honors students are just average in social skills. This may be due to the individual developmental stage of each middle school student. Some of these students are just entering the formative stage of development, while many others are in the concrete stage. This may explain why socially they lack the maturity that honors college students possess. Both teachers and students agree that middle school honors students rated higher academically compared to their non-honors counterparts. This is based on the criteria needed to enter an honors program, in which this school district includes high grades, high scores on standardized tests, teacher recommendations, and a writing sample. It is not confirmed whether these middle school students continue with the high performance on the standardized tests after their enrollment in the program, which was found in Kulik's (1982) study in high school honors students.

However, socially, there are no screening criteria used to determine the student's level of psychological development. As a result, many students lack good personal habits, due to immature brain development (Yurgelon-Todd, 2002). With the frontal cortical system being underdeveloped, students lack motivation, and tend to be highly impulsive. Even these honors adolescents have trouble focusing on long term goals, including the value for education (Bjork, et al., 2004; Chambers, Taylor, & Potenza, 2003). A majority of students reported value in education due to a belief that it will help them in the future. However, many are making poor

choices even in the honor's program, as reported by both student and the teacher participants. With the implementation of the honors program in the middle school, it is important to understand that the students are just searching for identity and tend to value their peers more than their parents, so the program must try to help students move to the last developmental stage. These social and personal habits are the main quality difference between findings for middle school students, as opposed to college students, who tend to rate higher than their non-honors counterparts in both areas. College students have reached formative stages of development, which may explain the difference in social maturity demonstrated between collegiate and middle school students.

This study supports the finding that minority students are underrepresented in the honors program even within this urban district, which has a high number of minority students. Lucas, Hull, and Brantley's (1995) finding, which shows that majority of honors program participants are white and female, was true in this district. Based on the district's demographics, white students were overrepresented in the honors program at 37.5%, while 19.5% of the white students are enrolled in the district. Asian American students were overrepresented (6.6%), since Asian and other students make up only 2.3% of the total students in this district.

Overall, many of the findings for college and high school honors programs are confirmed in this study: the benefits of the program, with the exception of the class size and curriculum; student and teacher satisfaction with the HP; teacher's teaching methods, with the exception of independence and self-expression; perceptions of the honors students academically; reasons for and against the enrollment; and the overrepresentation of female and white students in the program. The differences in benefits for teachers in the middle school program are lower personal and social skills (maturity) than expected from the honors students.

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The hypothesis that the middle school honors, like college and high school students rating in the areas of academic abilities, personal habits, and aspirations, will be higher than the non-honors students was confirmed in a few areas. The areas of academic ability, artistic ability, computer skills, cooperativeness, creativity, motivation to achieve, emotional health, leadership ability, mathematical ability, physical health, and intellectual self-confidence were higher for the honors students. Negative personal habits of partying and participating in online social networks are higher for non-honors students, while positive habits of reading for pleasure, completing studying and homework, and participating in student groups are higher for honors students. Honors students' positive personal habit of supporting opinions with facts is higher than in the non-honors students. In addition, being respected in their future career is more important to honors students, while being successful in a business of their own is more important to nonhonors students. All other areas of academic, personal, and aspiration ratings were similar for the two groups, which is different from college students reporting, which is higher for honors students in all areas. Middle school honors students do not have the same qualities as high school and college honors students, which reinforces the need for further research on the middle school

HP.

There are limitations for this study, the largest one being the overall population of the district which is diverse and urban, thus not representing all districts. Limitations include the ability to generalize findings to other populations who may not have the same characteristics as the diverse urban community in this district. The validity of the survey instrument may be questioned due to its initial design that is intended for honors colleges and additional questions that were generated without a statistical pilot test.

More research is needed on the middle school honors program as these programs continue to be implemented, thus impacting the students who choose to take advantage of the

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academic challenges provided through the program. These programs shape personal and social identities of the high school students enrolled in these classes (Yonezawa, Wells, & Serna, 1992), which may hold true at the middle school level as well. This study provided a crucial step in measuring perceptions of the honors program in general by teachers and students; however, future studies should focus on the long-term effects of this program on students and communities. Are middle school students truly better off when they are enrolled and complete the program, like high school students who take AP classes (Creech, 1995)? Do they make more money, have a better education, and succeed later in life?

The performance of students who are enrolled in this program should be continued and some tracking studies have begun this process. Including interviews of students in the program would provide useful and enriching data for measuring the whole experience of being in the honors program at the middle school level. Finding a more standardized test of measure would be useful with the comparison in performances of the students in the middle school. Having a national organization similar to the National Collegiate Honors Council would be extremely beneficial in developing a standardized way of implementing the HP in the middle school, measuring honors performance, training the teachers, and providing a clear set of expectations for all schools. This communication would be a tremendous assistance to schools, teachers, students, and parents as they decide to become a part of this growing program.

References

- American Psychological Association. (2001). Publication Manual of the American Psychological Association (5th ed.). Washington, DC: Author
- Austin A. (1993). *What matters in college? Four critical years revisited*. San Francisco, CA: Jossey Bass.
- Bjork, J.M., Knutson, B., Fong, G.W., Caggiano, D.M., Bennett, S.M., & Hommer, D.W. (2004). Incentive-selected brain activities in adolescents: Similarities and differences from young adults. *The Journal of Neuro-science*, 24, 1793-1802.
- Brown, A.L., Metz, E.K., & Campione, J.C. (1996). Social interaction and individual understanding in community learners: The influence of Piaget and Vygotski. In A. Tryphon & J Voneche (Eds.), Piaget-Vygotski: The Social genesis of thought (pp. 145-170). Hove. England: Psychology/Erlbaum (UK) Tylor & Francis.
- Brown, B.B., & Klute, C. (2003). Friendships, cliques, and crowds. In G.R. Adams and M.D. Berzonsky. (Eds.), *Blackwell handbook of adolescence* (pp.330-348). Malden, MA: Blackwell.
- Chambers, R.A., Taylor, J.R., & Potenza, M.N. (2003). Developmental neurocircuitry of motivation in adolescence: A critical period of addiction vulnerability. *American Journal* of Psychiatry, 160, 1041-1052.
- Christopher, M. (2005). Perceptions of the university honors college by gifted university students: A case study. *Roeper Review*, 27 (2), 121.
- Cohen, L. (1985). *Honors programs in the community colleges: reality and promise*. Princeton: Princeton University: Mid-Career Fellowship Program. (ERIC Document Reproduction Service No. ED 265906)
- College Board (2000). *Advanced placement performance by state and ethnicity*. New York: College Board Publication.
- Creech, J. (1995). *Challenging students to higher standards through advanced placement.* Southern Regional Education Board. Atlanta, GA. (ERIC Reproduction Service No. ED 387753)
- Darity, W. J., Castellino, D., Tyson, K., Cobb, C., & McMillen, B. (2001). Increasing opportunity to lean via access to rigorous courses and programs: One strategy for closing the achievement gap for at-risk and ethnic minority students. Raleigh, NC: North Carolina Department of Public Instruction. (ERIC Document Reproduction Service No. ED 459303)

Driscoll, D.P. (2002). Promoting high achievement: Policies and programs for

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academically advanced students in Massachusetts. Malden, MA: Center for Teaching and Learning. Massachusetts Department of Education (ERIC Document Reproduction No. ED481546)

Elkind, D. (1984). All grown up and no place to go. Reading, MA: Addison-Wesley.

- Elkind, D. (1998). All grown up and no place to go. Reading, MA: Perseus Books.
- Erikson, E.H. (1968). Identity: Youth and crisis. New York, NY: Norton.
- Gamoran, A. (1992a) Access to Excellence: Assignment to Honors English Classes in The Transition from Middle to High School. *Educational Evaluation and Policy Analysis*, 14, 185-204.
- Gamoran, A. (1986). Instructional and institutional effects of ability grouping. *Sociology* of Education, 59 (4), 185-198.
- Gamoran, A., Porter, A.C., Smithson, J., & White, P.A. (1997). Upgrading high school mathematics instruction: improving learning opportunities for low-achieving, low-income youth. *Educational Evaluation and Policy Analysis*, 19, (4), 325-338.
- Gamoran, A. (1987). The stratification of high school learning opportunities. *Sociology of Education, 60,* 135-155
- Gamoran, A. (1992b). The variable effects of high school tracking. *American Sociological Review*, 57 (6), 812-828.
- Gentemann, K.M., Zhou, Y., Zamon, M., & McShery. E. (2006). 2005 CIRP Freshmen Survey Report: Honors Program. George Mason University. Office of Institutional Assessment.
- Halverson. W.H. (1973). *Report and recommendations of the ad hoc task force on honors*. Columbus: The Ohio State University.
- Herr, N.E. (1990). *Advanced science instruction in American high schools*. Unpublished doctoral dissertation. California, University of California.
- Herr, N.E. (1991). The influence of program format on the professional development of science teachers: Teachers perceptions of AP and honors science courses. *Science Education*, 75 (6), 61-629.
- Herr, N.E. (1992a). A comprehensive analysis of the perceived influence of advanced placement and honors program upon science instruction. *Journal of Research and Science Teaching*, 29 (5), 521-532.
- Herr, N.E. (1992b). Administrative policies regarding advanced placement of honors coursework, *National Association on Secondary School Principals Bulletin*, 76, 80-87.

- Kelly, S.K. (1990). The relationships of instructional placement and other correlates to the academic, social, personal, extant, desired, and presenting self-concepts of a groups of academically gifted and nongifted adolescents. Unpublished doctoral dissertation, Indiana University, Indiana.
- Kulik, C.L., & Kulik, J. (1982) Effects of Ability Grouping on Secondary School Students: A Meta-Analysis of Evaluation Findings. *American Educational Research Journal*, 19, 415-428.
- Lucas, J.A., Hull, E., & Brantley, F. (1995). Follow-up study on students taking honors courses. Chicago: William Rainey Harper College. 24 (10). (ERIC Document Reproduction Service No. ED397904)
- Ma, X. (2005). A longitudinal assessment of early acceleration of students in mathematics on growth in mathematic achievement. *Developmental Review*, 25 (1), 104-131.
- Mansfield, W., & Farris, E. (1992). Public school principal survey on safe, disciplined, and drug-free schools. Contractor Report. E.D. TABS. U.S. Government Printing Office, Superintendent of Documents, Washington, DC. (ERIC Document Reproduction Service No. ED342131)
- Mason, D.A., Schroeter, D.D., Comps, R.K., & Washington, K. (1992). Assessing average-achieving eight graders to advanced mathematics classes in an urban junior high. *Elementary School Journal*, 92, 587-599.
- McKeague, P. M. (1984, June). *The role of the honors program in the community college curriculum.* Paper presented at the Annual National Conference on Teaching Excellence, Austin, TX. (ERIC Document Reproduction Service No. ED 252 260
- Morris, M. (2005). Two sides of the communicative coin: Honors and nonhonors French and Spanish classes in a Midwestern high school. *Foreign Language Annals*, 38, (2), 236-250.
- Moustakas, C. (1994). Phenomenological research methods. Thousand Oaks, CA: Sage.
- National Association for Gifted Children (2005). *Frequently asked questions: How many gifted children are there in U.S.*? Retrieved September12, 2007 from http://www.nagc.org/index.aspx?id=548
- National Collegiate Honors Council. (1999). *Basic characteristics of a fully-developed honors program*." The National Honors Report, 10, 17-18.
- Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven, CT: Yale University Press.

- Oakes, J. (1991). *Multiplying inequalities: The effect of race, social class, and tracking on opportunities to learn mathematics and science.* Santa Monica, CA: RAND.
- Oakes, J., Gamoran A., & Page, R. (1992). *Curriculum differentiation: Opportunities, outcomes and meanings*. Handbook of Research and Curriculum. New York: Macmillan. 570-608.
- Piaget, J. (1972). Intellectual evolution from adolescence to adulthood. *Human Development*, 15, 1-12.
- Rinn, A. (2007). Effects of programmatic selectivity on the academic achievement, academic self-concepts, and aspirations of gifted college. *Gifted Child Quarterly*, 51 (3), 232-245.
- Rinn, A. (2005) Trends Among Honors College Students: An Analysis by Year in School. *Journal of Secondary Gifted Education*, 16 (4), 157-167.
- Rose, H., & Betts, J.R. (2004). The effect of high school courses on earnings. *Review of Economics and Statistics*, 86 (2), 497-513.
- Rosonbaum, J. (1976). *Making inequality: The hidden curriculum of high school tracking*. New York: Wiley.
- Seifert, T.A., Pascarella, E.T., Colangelo, N., & Assouline, S.G. (2007). The effects of honors program participation on experiences of good practices and learning outcomes. *Journal of College Student Development*, 48 (1), 57-74.
- Waggoner, G.R. (1963). Independent-study programs. *Journal of Higher Education*, 34, 49-51.
- Yonezawa, S., Wells, A. and Serna, I. (2002). Choosing Tracks: Freedom of Choice in Detracking Schools. *American Educational Research Journal*, 39 (1), 37-67.
- Yurgelon-Todd, D. (2002). *Inside the teen brain*. Retrieved September 18, 2007, from <u>http://www.pbs</u>./org/wgbh/pages/frontline/shows/teenbrain/ interviews/todd.html.



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