

Twice-Exceptional Students Enrolled in Advanced Placement Classes

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Abstract

Twice-exceptional students, those who have disabilities and display areas of gifts or talents, frequently spend their high school years with a focus on their disabilities. Using semistructured interviews, this study explores the perceptions of parents, teachers, and guidance counselors regarding participation of twice-exceptional students in Advanced Placement (AP) and for-college-credit classes. The supports and barriers for students with disabilities participating in AP and for-college-credit classes were identified. Additionally, participants included six college students who had taken AP and/or for-college-credit classes while still in high school. The results of this study indicated that school culture and early placement decisions affect enrollment in AP and for-college-credit classes for the twice-exceptional student. Inconsistencies between students' goals and transition planning and inconsistent implementation of test and environmental accommodations were documented.

Keywords

Advanced Placement, high school, special populations/underserved gifted, twice-exceptional

Twice-exceptional students, those students diagnosed with disabilities who also demonstrate areas of high ability, are often noticed because of their special needs or what they cannot do rather than because of their strengths. For purposes of this study, twice-exceptional students were defined as students who were eligible for special education services who also demonstrated one or more areas of high ability. Twice-exceptional students display talent or ability concomitant with their disability (Schultz, 2009). Because the focus of their education becomes correcting deficits, few opportunities are available for highly capable students with learning disabilities to demonstrate their talents and abilities (Dole, 2000). Students with disabilities may have trouble attaining the required competency in some subjects. Educators often concentrate on remediation in students' individualized educational plans (IEPs), taking the focus off other objectives that are related to students' academic strengths (King, 2005) and thus reducing the school experience to credits and classes needed for graduation.

Twice-exceptional students are "unique" individuals who require "unique" educational interventions (Assouline, Foley Nicpon, & Huber, 2006). It is important that their educational experiences and curricula are matched to their strengths. As stated by Assouline et al. (2006), "The challenge for educators is to assimilate information about student's strengths and/or vulnerabilities so that student achievement is enhanced, not stifled" (p. 15). Subsequently, the opportunity to participate in rigorous coursework while still in high school may provide an appropriate curriculum match for the twice-exceptional student.

The academic intensity of a student's high school curriculum is directly connected to successfully completing a bachelor's degree. According to Alderman (2006), "Advanced Placement courses contribute to the highest level of academic intensity in a high school curriculum" (p. 2). The College Board, state and national policy makers, and individual school districts have also supported the value of increasing the academic intensity of high school curriculum by encouraging *all* students to work toward participating in more arduous advanced coursework. For example, the College Board (2009b) noted, "Educators across the United States continue to enable a wider and ethnically diverse proportion of students to achieve success in AP [Advanced Placement]" (p. 2). However, the College Board (2009b) also stated, "True equity is not achieved until the demographics of AP participation and performance reflect the demographics of the nation" (p. 7). Given a recent push toward higher standards and the provisions in federal mandates—No Child Left Behind and Individuals With Disabilities Education Act—one would assume that all students have open access to Advanced Placement (AP) and other for-college-credit classes, including students with disabilities. One also would assume that the most capable students with disabilities, those who demonstrate areas of high ability and who were labeled *twice-exceptional*, are

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participating in such classes. For the purpose of this study, students were identified as being twice-exceptional by their parents or school personnel.

To reach their full potential, twice-exceptional students need a balanced educational program that nurtures their gifts and talents while providing intervention for their disabilities. When twice-exceptional students' strengths are addressed while providing support for their weaknesses, students may gain the greatest benefit from their programs (Weinfeld, Barnes-Robinson, Jeweler, & Roffman Shevitz, 2005). To fully access the curriculum, twice-exceptional students may need to use accommodations. However, Weinfeld et al. (2005) reported their experiences in Maryland's Montgomery County Public Schools, which indicated that gifted and talented students with learning disabilities "often receive inadequate or inappropriate adaptations and accommodations, thereby making their access to gifted instruction problematic" (p. 48).

Additionally problematic, the structure of the American school system frequently precludes students from participating in both gifted/honors and special education programs. Often these programs are in direct conflict, in theory (Jolly, 2007; Kettler, 2007) and in scheduling. Many school programs seem designed to either remediate weaknesses or develop gifts and talents but are unable to address both simultaneously. Single sections of remedial and for-college-credit classes offered by schools inadvertently prevent twice-exceptional students from participating in both special education and services for students with advanced skills (Brody & Mills, 1997; Grimm, 1998). As a result, some students with disabilities are denied the opportunity to participate in advanced level classes because the focus of their program is on remediation.

Theoretical Framework

This study employs the theory of critical pragmatism (Skrtic, 1991) and the works of Mel Levine as the framework of this study. Skrtic encourages educators to use the theory of critical pragmatism, to continually reevaluate and appraise the practices of a profession. Skrtic believes that each profession has a culture, grounded in unquestioned and unchallenged assumptions that are reflected in the knowledge base and traditions of its practices. Without a crisis, the profession continues to accept and interpret their world as status quo. Using the theory of critical pragmatism, researchers can expand the discourse in the field by drawing on the viewpoints of all participants through inquiry.

Furthermore, Skrtic (1991) posits that special education emerged to contain the "failure of public education to realize its democratic ideals" (p. 46) of being equitable and providing a quality education for all. He challenges us to examine the field of education and expose contradictions that occur between our values and actual practices to find alternate assumptions and, more important, develop a belief system with implications for ethical and equitable practices.

Levine (1998) has conducted research in the field of developmental disabilities, focusing on increasing the knowledge and skill school personnel require to meet the diverse needs of all students. Levine (1998) states that when a student displays uneven abilities, he suffers for his variations. Consequently, schools must find ways to provide for the student's strengths, providing instruction and challenges in the student's strong domains. Yet many students with disabilities experience repeated failure and struggle to get past remediation. Subsequently, when accounting for underlying factors that cause dysfunctions, schools run the risk of exaggerating a student's differences, whereas their strengths are left to wane (Levine, 1998).

Guided by Skrtic's theory on critical pragmatism and Levine's approach to managing the education of students with special needs, the researcher of this exploratory study examined the perceptions of teachers, guidance counselors, and parents from five school districts to investigate their attitudes about participation of students with disabilities in AP and for-college-credit partnerships between school districts and local colleges. In for-college-credit partnerships, students were not enrolled in the college but in a college class taught by a high school faculty member on their high school campus. In for-college-credit classes, students were graded on work completed during the entire semester and received credit for obtaining a passing grade of C or better, whereas in AP, college credit was received only when the AP student passed a standardized exam.

This study primarily investigated the perspectives of parents, teachers, and guidance counselors regarding the participation of high school students with disabilities in both AP and for-college-credit classes. Second, it examined access and equity issues by identifying the determinants that assisted or prevented these students from enrolling in AP and for-college-credit classes while still in high school, by reviewing high school policies, and interviewing and gaining the perspectives of college students with disabilities who took AP classes while still in high school.

Method

Participants

There were 36 participants. Participants in this study included parents, teachers, and guidance counselors from five public high schools in upstate New York. The sample population included 12 parents of students with disabilities who participated in AP or for-college-credit-classes, 12 teachers of students with disabilities who participated in AP or for-college-credit classes, and 6 guidance counselors in these schools. Fewer guidance counselors were interviewed to account for guidance counselors who served more than one student. Participants are not equally represented as triads (parent of student, teacher of student, and guidance counselor of student), as not all individuals in each set agreed to

Table 1. Identification of Participation by School

	Cedar	Willow	Elm	Oak	Maple
Teacher	6, 12	1, 4, 8	2, 7, 8	3, 5, 11	9, 10
Parent	6, 12	1, 2, 3, 4, 11	5, 8	9, 10	7
Counselor	3, 4	1	2	5	6

participate in the study. Furthermore, when teachers and guidance counselors spoke of students, they often referred to both—students that they were currently working with as well as students they previously worked with whose parents were not part of this study. Parents representing all the five participating school districts had children who were enrolled in those respective schools. Additionally, participants included 6 college students who had taken AP and/or for-college-credit classes while still in high school. Participants are identified in Table 1 by school district.

The parents, teachers, and guidance counselors provided their views about the experiences of 12 twice-exceptional high school students. Eleven of the 12 students had been diagnosed with learning disabilities, one of whom had concomitant disabilities (learning disabled/deaf). The 12th student was classified as having multiple disabilities and was confined to a wheelchair. The students took a variety of AP (nine different classes) and for-college-credit classes (six different classes). Of the 12 high school students, parents reported that 10 took more than one AP and/or for-college-credit class. Enrollment was verified with each participating school district. The 6 college students, recruited from colleges in the Buffalo and Rochester area, had attended various high schools across New York State and were not related to the parent participants. Of the 6 twice-exceptional college student participants, 5 had taken more than one AP and/or for-college-credit class, as outlined in Table 2.

All the interviewed teachers and guidance counselors self-reported that they had middle-class socioeconomic backgrounds. Parent participants and college students came from lower and middle-class backgrounds. Lower socioeconomic status was defined as participants who received public assistance. The five school districts represented in this study included three suburban and two rural districts, with student bodies ranging in size from 1,300 to 9,348 primarily Caucasian students, representative of the geographic area. Initially, six school districts declined to participate for various reasons; however, two of those did participate after further discussion. Four school district administrators who declined to participate voiced concerns about the possibility of their students being identified. The two school districts that initially declined to participate did so based on the perceptions of school district administrators who assumed that they did not have students with disabilities participating in such classes. Finding they did indeed have twice-exceptional students enrolled in AP and for-college-credit

Table 2. Number of Advanced Placement (AP) and/or For-College-Credit Classes Taken

Child of parent/College student	AP	For-college-credit classes
Parent 1	0	3
Parent 2	1	4
Parent 3	1	3
Parent 4	1 ^a	2
Parent 5	2	0
Parent 6	1	0
Parent 7	3	2
Parent 8	0	2
Parent 9	1	0
Parent 10	3	0
Parent 11	0	4
Parent 12	4	0
College Student 1	2	0
College Student 2	1	3
College Student 3	0	2
College Student 4	1	4
College Student 5	2	4
College Student 6	1	0

a. The student dropped the class for reasons other than academic.

classes, they agreed to participate. In contrast, six additional school district administrators who initially verbally agreed to participate were surprised to find that they did not have any students with disabilities participating in AP or for-college-credit classes, leaving these six schools ineligible for the study.

Procedure

Semistructured interviews, conducted by telephone and audio-taped, were used to allow for clarification and question probing of participants and the schools being studied. The semistructured interviewing techniques also allowed for addressing the subjective nature and lack of uniformity in individual school district policy for participation in AP and college-level classes and the variation in interpreting and implementing special education regulations. The focus of the interviews was to determine if the supports and barriers suggested by parents, teachers, and guidance counselors influenced the high school experiences of students. Interviews, conducted during the 2005-2006 school year, were recorded and then transcribed. Prior to data analysis, transcripts were sent to participants to verify accuracy of collected data. One teacher participant reworded her response, and another teacher participant corrected her grammar. Participant profile sheets and interview questions are included as appendices: Appendix A, Parent Profile Sheet; Appendix B, Teacher/Guidance Counselor Profile Sheet; Appendix C, Parent Interview Questions; Appendix D, Teacher Interview Questions; Appendix E, Guidance Counselor Interview

Questions; and Appendix F, College Student Interview Questions.

Data Analysis

Content analysis and analytic induction described by Goetz and LeCompte (1984) and Becker (1998) were used to synthesize and reduce the units of meaning by coding data into categories. The interview questions were a broad starting point for generating categories for analysis. Categories were then created as they emerged. The second stage included reviewing the comments in each category to search for explanations, patterns, regularities, variations, and exceptions. Third, graphically organizing and categorizing data and repeating readings of the transcripts and analysis occurred to look for various assertions and emerging theories. Data were triangulated using three separate data points to examine evidence, by first examining school policies; then the multiple perspectives of parents, teachers, and guidance counselors of twice-exceptional students; and last, comparing their perspectives with those of the college students with disabilities.

Results

Successful participation in AP and for-college-credit classes, defined differently by adults and college students, frequently depended on decisions made earlier in the twice-exceptional student's educational career. The importance of mentoring and emotionally supporting the twice-exceptional student also developed as a theme. Six themes were identified as they emerged: the importance of school culture, interpretations of equity, test and environmental accommodations, the importance of early education, mentoring and familiarity with the twice-exceptional student, and positive experiences with teachers.

Defining Successful AP Participation

All the high school students and all but one college student passed their AP exam(s) and for-college-credit classes. Although the adults measured the success of their participation most often by exam or course grades, college students looked past the grade. Although they understood the importance of the grade, all the college students defined themselves as successful by the amount of information they had learned and retained, which provided a good foundation for a similar class in college. The college student who did not pass AP French took French over again in college and passed the class.

The Importance of School Culture

A school's culture may be defined by the local values, meanings, traditions, and purposes that are used by schools, each developing individual characteristics (Sergiovanni, 2000).

Table 3. Participants Who Believe School Culture Affected Enrollment in Advanced Placement/For-College-Credit Classes

	Cedar	Willow	Elm	Oak	Maple
Teacher	6		2, 7	3, 5, 11	9, 10
Parent	6, 12	1, 3, 4, 11	5, 8	9, 10	7
Counselor	3, 4		2	5	6

Twenty-four of the 30 participants believed school culture affected the enrollment in AP and/or for-college-credit classes, as reported in Table 3. Eleven of the 12 parents, 8 of 10 teachers, and 5 of 6 guidance counselors believed school culture played a role in enrollment decisions. The college student participants were not asked this question.

The culture of each of the five participating schools was found to have an impact on whether the twice-exceptional student had access to AP or for-college-credit opportunities. For example, in Cedar and Oak School Districts, the classes were perceived by teachers to be in lieu of a gifted program. This perception generally excluded students who were not in the honors program. According to the guidance counselors, a trend had been established in which enrollment in AP and/or for-college-credit classes tended to be an extension of the honors programs. Teachers at Maple School District had to approve the student's request to participate in an AP or for-college-credit class, allowing each individual teacher to act as the gatekeeper. At Elm School District, teachers stated that the AP/for-college-credit programs were designed to refine the already well-developed writing skills of the college bound student who had already participated in the honors program.

In contrast with the other districts, Willow School District used AP classes to continue to develop and nurture the skills of interested students to help prepare them for college. In comparison to the other districts in this study, Willow School District had significantly more students with disabilities participating in for-college-credit classes. When asked if there was a district-wide initiative to include students with disabilities in AP and for-college-credit classes, the guidance counselor responded that there was "not a district wide plan, but more of a general philosophy that the district is not going to be exclusive without a compelling reason" (Guidance Counselor 1, Willow School District). Teachers at Willow asserted that the classes were a good transition to college-level work for all students, because they provided less structure than students were used to yet more structure than a college classroom. This philosophy made students, while in the safety of their high school environment, aware of what to expect in college.

Given differences in philosophy from school to school, school culture can be a determining factor for placement of the twice-exceptional student in an AP or for-college-credit class. Although one school used the AP classes as an

extension of the honors program, another had an open-door policy. Twenty four of the 36 participants believed school culture affected the enrollment in AP and/or for-college-credit classes, as reported in Table 3.

Interpretations of Equity

Some of the teachers' and guidance counselors' beliefs focused on equity on the basis of the Equity Policy Statement of the College Board (2009a), which asserted that all students who are willing to accept the challenge deserve the opportunity to participate in rigorous, academically challenging courses and programs and should be considered for admission. The College Board (2009a) encourages schools to eliminate barriers that restrict access for the students from groups that are typically underrepresented in the AP program and to make an effort to ensure that AP classes reflect the diversity of the school's population. However, not all schools provide students with special needs the same access as their general education peers. As an explanation as to why so few students with special needs participate in AP classes, a guidance counselor at Elm School District asserted that they treated all of the students similarly, which their teachers and guidance counselors viewed as fair. Clear-cut guidelines were seen as a way to remove selection bias: "What we are trying to institute here is fairness and consistency. So what is good for one student has to be good for another student" (Guidance Counselor 2, Elm School District). Students with special needs rarely met their selection criteria.

Lack of flexibility regarding guidelines was seen as leveling the playing field, since the guidelines were the same for all students. However, students with learning disabilities often showed variation in their skills and abilities, and many had subject areas of weakness that in spite of remediation remained below grade-level expectations. Rather than creating a fair and equitable program, the guidelines provided a justifiable way to exclude students when their development was variable. In spite of their high intellectual abilities, the twice-exceptional students' strengths were left unchallenged, focusing on their weaknesses. One teacher from Cedar School District commented that rigid guidelines can disadvantage the twice-exceptional student by focusing on their weaknesses:

If you are interested in AP Global, and you had a 99 average in Global, but you are failing Math, you're not eligible for the AP program because we expect the students to be able to balance and manage their time in all of the subject areas, so if they devote all of their time and energy to one AP class, at the risk of another (class), they are not eligible for the program. You can want to take AP History, but if you are failing math, it's not an option for you. Just because you want to take it doesn't mean you get to take the course. (Teacher 12, Cedar School District)

Inflexible policies developed and adopted by schools assumed "one size fits all." This type of policy discriminated against students who had learning disorders in one subject area but who may also have had gifts and talents in another area.

Student Goals and Transition Planning

According to Flexer, Baer, Luff, and Simmons (2008), more students with disabilities are enrolling in college, and half of these who do will drop out before completing college, because of being less prepared for college than are their peers without disabilities. Eckes and Ochoa (2005) also asserted that the number of students with disabilities attending college is on the rise, necessitating better transitions between high school and postsecondary institutions. Yet Hitchings, Retish, and Horvath (2005) indicated that guidance counselors and parents often advised students with disabilities to enroll into classes that were not consistent with their postsecondary goals and/or discouraged their interest in careers requiring college.

All the parent participants and college students noted that enrolling in a for-college-credit class was not part of their transition process, even when students' postsecondary goals included attending college. College Student 2 reported, "I had all the classes I needed pretty much to graduate, except for my senior ones, like Economics and Government and stuff like that. So I pretty much decided to see what it [participating in AP] was like." College Student 3 was less purposeful. He stated that transitioning to college "wasn't on my mind at the time I enrolled" in an AP class. Students who were in the process of completing transition plans while congruently participating in college-level classes found that their attendance in a for-college-credit class was not brought up for discussion but was treated as a separate event. Transition planning that included discussion of their participation in the AP or for-college-credit class that they were enrolled in could have provided the opportunity to assist the student not only in thinking about college as a postsecondary option but also preparing the student to think about and plan for a successful transition to college.

Test and Environmental Accommodations

Environmental accommodations that students had outlined in their plans included copies of class notes, use of a word processor, and organizational assistance. Many of the students attending AP and/or for-college-credit classes did not have the full benefits of their IEPs (15 students) or 504 Plans (1 student). Overall, 16 of 18 parents and students reported problems with the implementation of these plans in the AP and/or college-class environment.

The students reported that there were AP and/or for-college-credit classroom teachers who made few accommodations for them or who discouraged them from accessing the accommodation(s) on their IEP. Teacher 7 (Elm School

District) claimed that accommodations are “stuff that I frankly don’t have time to do.” Several parents reported their high school students were denied their accommodations, whereas others stated that their children did not feel comfortable enough in the for-college-credit setting to advocate for them when they were not offered support. College student participants repeatedly gave similar accounts, reporting that they were denied or discouraged from using accommodations. The college students reported that some teachers made them uncomfortable when they wanted to use their test accommodation of a separate location. College Student 2 reported,

It wasn’t in the whole AP program. Once in awhile, a teacher would be a little stubborn about letting me go to the resource room to take a test. When I was in AP Math [AP Statistics], my teacher would get fidgety if you went out of her classroom to take a test out of the normal area.

Another college student reported that some teachers would not allow his test accommodation of extended time. He reported, “Sometimes they just said, ‘No, you get the same time as everybody else’” (College Student 3).

In contrast, teachers and guidance counselors who viewed accommodations as a support were mindful of the students’ learning differences related to their disabilities. Teachers who understood the twice-exceptional students’ need for test and environmental accommodations agreed that by providing these accommodations, they were providing students with disabilities an opportunity to participate in a challenging curriculum. The teachers described twice-exceptional students as needing equal opportunity to demonstrate their knowledge without being restricted by their disabilities. Several of the teachers voiced the same viewpoint as Teacher 1, who claimed that although students with disabilities may not be able to write as well, “they are equally, if not brighter than the regular ed kids, and are more than capable of keeping up with the discussions in the class.” He asserted that his twice-exceptional student made him a “better teacher” (Teacher 1, Willow School District). Another teacher indicated that all students in the class benefited by the accommodations he made for the student with disabilities, such as memory games and copies of notes.

A number of professionals confirmed the parents’ and students’ reports that not all teachers in their district were fully cooperative and compliant regarding IEP accommodations. Several of the teachers did not believe that accommodations would be allowed in an AP or college environment. Other teachers stated that they received training on students with disabilities, but since they teach the “high-end” students, they believed professional development on IEPs and regulations did not pertain to them, and they either did not participate in district workshops or did not pay full attention.

The viewpoints of other teachers did not support the student with special needs as a participant in an AP or

for-college-credit experience. Several teacher participants were adamantly against enrolling a student who might need accommodations. One teacher asserted that using AP as a transition to college goes against what AP stands for. She noted, “If a student needs additional accommodations or modifications, it is not the right place for him or her” (Teacher 3, Oak School District). Another teacher who stated that the homework load was too hard for students with special needs maintained, “If their IEP or 504 Plan says they cannot keep up with the papers, they have to leave the course” (Teacher 4, Willow School District). One teacher did not philosophically believe in test accommodations:

For example, I have a kid in my class. I give him a test. Now if the special ed teacher is going to take the kid out of my class for testing purposes, and give him an alternate testing site, that is a lot of money we are spending for someone to baby-sit a kid while he takes a test outside of my class. (Teacher 4, Willow School District)

Parent 12, describing her daughter’s experience in the AP class, reported, “She was not supposed to take off for spelling, and the teacher would say, ‘I don’t care, I take off for spelling.’” One student with a hearing loss needed an interpreter for AP Calculus and AP Physics, and one of the teachers reported that the interpreter was not comfortable with the level of the content in the class that he was expected to interpret.

One parent participant reported that her child declined to use his accommodations, as he did not want to stand out in the classroom. Eight of the teacher participants in this study felt that they did not want to emphasize the student’s disability. Teachers indicated that they thought the opportunity to participate in a for-college-credit class was enough for the student to be successful. One parent stated,

They felt, I think we all felt, that because that it [the curriculum] would be interesting enough to him that it would motivate him enough to kind of overcome the organizational piece that was the handicap. That was our expectation. (Parent 1)

The Importance of Early Education

During the interviews, it became apparent that these parents, regardless of school district, had historically fought for their children to participate in the least restrictive environment. Many of the parents recounted their fight for appropriate challenging placements for their children while they were in elementary school. Parents from all participating school districts felt strongly that their children had opportunities to participate in higher level classes in high school because of the battles they fought early on. The parents argued to have their children placed in classrooms that challenged them in the areas

of their strengths while also addressing their disabilities. One parent's account indicates that her son's fourth-grade teacher did not want him in her academically advanced group because he was a special education student. The student's third-grade teacher and parent advocated for him to remain in the class. The parent recounts her experiences as follows:

She even said to me the first day of school, she goes, "I have the best kids in this class, we grouped them all together, and we're gonna fly and I don't want anything holding us down, and I'm afraid [her son] will hold us down." And I said, "I think you've got to give him a chance," and she said "Well, I don't know, I think it's just going to be too difficult for him." And so, then I said, "You've got to try." So then we had a meeting, and she had over eight days taken scrupulous notes, on every single time he was on the wrong page, or didn't get an assignment off the board, or something like that which was of course all of his learning disability because he couldn't far-point copy or any of that stuff. She had it all written down, saying why he should get out. (Parent 4)

Her child was allowed to stay in the class once his father started discussing legal procedures. However, the teacher insisted that he drop band because she didn't think he would be capable of handling the academic work and playing a musical instrument. The parent states,

He still regrets that to this day that he had to stay out of band because he was in special ed and it meant he couldn't handle this higher class, which he handled fine and got good grades all year. (Parent 4)

In addition to having to argue for challenging elementary experiences, another parent reported having to insist that his child be allowed to participate in prerequisite New York State Regents level classes at the high school level.

These parents understood the long-term effects of the decisions made earlier in their children's educational career. They had an awareness and understanding of the state standards and why it was important for their children to work toward successfully attaining them. They did not hesitate to disagree with placement recommendations when they believed the placement would not adequately challenge their children in areas of their strengths. In addition, they understood the educational impact of decisions made and the repercussions of choices that may eliminate opportunities. Parent 7 asserted as follows:

In order to do an advanced-level English class, you've got to have those English 1, 2, and 3 under your belt and exhibit proficiency, if you will, at a high enough level, and I think sometimes, the way that we schedule

classes, or decide it for them—You're going to go into the math that takes two years to do that first math exam, it's going to prevent them. . . . What they are doing now is they are doing double periods. So, if you didn't do well in that subject, guess what? If you didn't do well in English, you get to take two periods of English every day and I don't know. They need the extra help, but I'm not sure that's the best route. (Parent 7)

Parents played a vital role in ensuring that their students' strengths were maximized. They would not allow schools to place their children by their "perceived" potential. The expectation in these families was for their children to attend college in spite of their disabilities.

The college student participants clearly were self-assured, accepting of their disabilities, and aware of their strengths as well as their needs:

My mom, like our parents, is very open with us about our disabilities and reinforce that it didn't affect our intelligence in any way. It was just something you had to deal with, like if you had a cold, you go to the doctor or you sleep for a day, or you eat chicken soup. It's like the same thing. You deal with what you have and you work with it, and you overcome it. (College Student 2)

However, not all capable students with special needs are as insightful as this student, and as interview data reflect, all parents are not well acquainted enough with the educational system to know the impact of early educational decisions made for their students.

Mentoring and Familiarity With the Twice-Exceptional Student

Many of the participants discussed the important role that an adult mentor played in their enrollment in AP and/or for-college-credit classes. Mentors were most often special education teachers, or general education teachers; however, in some cases, guidance counselors and parents acted as mentors. These adults provided guidance and advised the students to participate in a for-college-credit class. They respected the twice-exceptional student's skills and abilities and encouraged the students to develop their strengths to their fullest potential.

Teacher and guidance counselor participants indicated that some students were capable of attaining success in more challenging courses but lacked the confidence and support to take the risk. The teachers and guidance counselors reported that these students could not perceive their role beyond that of a special education student, primarily because the feedback they received focused on their weaknesses. Guidance Counselor 3 (Cedar School District) stated, "Sometimes we

are our own worst enemies by shooting the students right in their toes, by making them feel so special, that they are not capable of doing this.” The guidance counselor believed that sometimes students picked up on adult perceptions of them as special education students, and subsequently, the students took on roles of students who were in need of direct adult support in all aspects of academia.

The college students and parents interviewed supported this view. Both the college students and parents revealed that if not for the support and encouragement of the adults around them, they would not have enrolled in the class. One parent of the student with a 504 Plan reported that her son’s teachers sat down with him and told him “there is really no reason why he can’t do it, that he would be better suited for it than the regular” (Parent 5). A college student recounted her experience, which began in the guidance office. Her counselor suggested taking AP History classes because of her high grades. He escorted her into the teacher’s room to discuss this option with her current history teacher. She stated, “My American History teacher, when he found out I that I was looking into it, dragged me into the other [AP] teacher’s room and both of them tried to convince me into taking one” (College Student 1).

Four other college students reported that the teacher responsible for their participation in AP and/or for-college-credit classes had taught them previously and had developed a positive relationship with them. The college students stated that their teachers played a significant role in their participation, suggesting that they enroll in AP and/or for-college-credit classes. These students had positive relationships with their teachers and demonstrated a high regard for their teachers as professionals. They maintained that their teachers understood their needs while respecting their strengths, teaching in multiple modalities, and appropriately and consistently implementing their IEPs or 504 Plans.

Positive Experiences of Teachers

When AP and for-college-credit teachers experienced working directly with twice-exceptional students, teachers’ viewpoints changed. One teacher articulated how the experience of working with a special needs student altered his perception of students with disabilities:

Probably the best lesson I had was last year. When I first found out the student had a 504 Plan or whatever, I was kind of surprised. Well! In AP—fine! I was surprised to see her there and that kind of shows my preconceived bias. I wouldn’t think they’d be there. But then as I have been educated by seeing this person work, you realize that they can be very strong in one area and weak in another. And so, that was my process of learning as an educator. I learned more about 504 Plans and stuff like that, but I need to learn a lot more, obviously. But overall, I would say people think they have a disability, they should be tracked with other

kids with disabilities, but when you’ve been around and see examples of it, you realize that is not probably true for every subject area. (Teacher 5, Oak School District)

One teacher at Cedar reported that he tried to convince his colleagues to view students with disabilities in a different light. However, he feels this can be difficult when educators cannot see past the student’s disability. He stated, “Just because you go to the doctor with a broken arm, they don’t put your whole body in a cast. You fix what’s broke and work toward that. It’s the same idea with special education services” (Teacher 6, Cedar School District).

Discussion

The results of this study indicate that school culture affects enrollment in AP and/or for-college-credit classes for the twice-exceptional student. Inconsistencies between the students’ goals and transition planning were documented. Additionally, twice-exceptional students found the inconsistent implementation of test and environmental accommodations to be a barrier. How teachers and guidance counselors interpreted policy also acted as a barrier.

School district administrators were often unaware of how interpretation of policy can present a barrier to the student with disabilities who may otherwise be capable of participating in college-level classes as a viable educational option. Inflexible policies, such as those requiring a certain grade point average, assume “one size fits all,” which discriminates against children with learning disorders who may also have areas of gifts and talents. The results of this study indicate that school culture affects enrollment in AP and/or for-college-credit classes for the twice-exceptional student. Inconsistencies between the students’ goals and transition planning were documented.

School culture also played a role in whether the student with special needs could enroll in an AP or for-college-credit class. Two small school districts with enrollments of 1,300 and 1,430 students cited higher percentages of special needs students successfully participating in AP and for-college-credit classes, relative to their large school counterparts, two of which had enrollment of more than 3,200 students and one with an enrollment of 4,946 students. This suggests that small schools are more able to build a positive culture conducive to increasing participation and controlling for factors that prevent participation. Twice-exceptional students who attend small schools appear to have an advantage. Their teachers become familiar with their strengths as well as their needs. Often teachers have previously taught them and are knowledgeable about implementing IEPs and 504 Plans. Conversely, the schools with higher enrollment had minimal, sometimes single, participants in the AP and for-college-credit classes. It appears that at these larger schools, the practice of selecting students for AP and for-college-credit courses by strictly

adhering to participation guidelines has limited access to opportunities for capable students who could benefit from participation. The lack of awareness that students with special needs can participate in AP and for-college-credit classes may also limit access to opportunities for potential participants. Professional development may help inform educators of opportunities for twice-exceptional students.

Professional development regarding IEPs and 504 Plans is also warranted, based on the inconsistent provision of accommodations. Such professional development needs to include all teachers, including those who teach honors classes, AP classes, and for-college-credit classes. Teachers need to be informed that the implementation of an IEP or 504 Plan is not an option but the law. Teachers also need to be informed that the College Board allows for test accommodations. It would be disconcerting for teachers not to refer capable twice-exceptional students to a for-college-credit program based on a misguided perception that test accommodations are not allowed, as some professionals asserted. There is also a need for all teachers to be trained about twice-exceptional students with tangible, real-life examples of variability in development to help create an understanding of the unevenness of their development.

The exposure to the special education system and twice-exceptional students in AP and for-college-credit classes altered the perceptions of the teachers. However, sometimes the difficulty in gaining experience with students with special needs lies in the small numbers of students with disabilities referred to AP and for-college-credit classes. When capable students with disabilities are not referred, teachers' insular views remain, perpetuating the cycle. Additionally, capable students with disabilities may lack the confidence to advocate for themselves. Many of the participants reported the important role mentors played, encouraging them to enroll in AP or college-level classes, to develop their skills to their full potential, and to play to their strengths.

Another factor that is important to consider is the readiness of students with special needs for college experience. Adreon and Durocher (2007) noted that students with disabilities can have difficulty with time management and study skills. Many students with special needs have difficulty adjusting to the pace, curriculum, and expected workload in college classes (Adreon & Durocher, 2007; Dana Center, 2001). The postsecondary success for the twice-exceptional student depends on the readiness for the demands of the college experience. Participation in a for-college-credit class would expose the twice-exceptional student to expectations of the college pace, curriculum, and workload. In most college classes, assignments are assigned at the beginning of the semester. Students are expected to work independently, completing the majority of assignments outside of class. Participation in a for-college-credit class would provide opportunities to monitor student progress, providing the twice-exceptional student and their peers with a higher level of teacher contact and guidance than the typical college environment would provide in a familiar environment.

It should be noted that the for-college-credit participants that were investigated in this study were noticeably self-assured, resilient students, who looked past their own disabilities. The college student participants were successful because of their work ethic, self-motivation, and perseverance, highlighting the importance of self-efficacy training for the student with a disability, as well as promoting the student's strengths and understanding of his or her disability. It is important for students with disabilities to be taught that they can face difficult tasks as challenges to be mastered. Participating in a mentoring relationship may assist the student in developing self-efficacy. When a teacher and student form a connection, as indicated by participants in this study, teachers can become aware of the student's strengths as well as their needs, and a mentoring relationship becomes possible.

There are two points that emerged in this study that should not be overlooked. First, teachers who worked directly with the students steadfastly declared that their viewpoints about twice-exceptional students and their pedagogical practices benefited from the experience. Second, yet equally important, is the consistent thread found in interviews that indicated that parents and teachers advocated and sometimes fought for students to have rigorous experiences that academically challenged their students' strengths and supported areas of need. They understood that decisions made about early educational experiences mattered and might affect future opportunities.

Limitations of This Study

There were several limitations of this study. Data collection was limited to those school districts willing to participate. Although several potential parent participants self-referred to this study, their school district administration did not complete the "consent to participate" required to involve the school and the parents as participants. Additionally, the individuality and unique needs of students with disabilities and the existence of local conditions at each school district may make it difficult for generalizing this study to other students.

Directions for Future Research

This study was undertaken with the intention that it would serve as a beginning for future research that moves beyond describing the difficulties that twice-exceptional students encounter and strives to find solutions to improve their participation rates in AP and for-college-credit classes. The successful integration of students with special needs into AP and for-college-credit classes at both Maple and Willow School Districts demonstrated that twice-exceptional students with disabilities can grow from the small representative samples reflected by some school districts. Only with more in-depth research of successful programs that include twice-exceptional students can word of their success infiltrate the schools that do not think their participation in AP and for-college-credit classes possible.

Conclusion

Since its inception, the AP program has grown from focusing on gifted students to currently attempting to include groups of underrepresented students. However, an analysis of the literature on AP classes and of twice-exceptional learners shows they are not included in the attempt to expand membership in AP classes. Currently, the College Board does not collect data on the number of participants with known disabilities. Under the Individuals With Disabilities Education Act, students with disabilities have the right to access the general education curriculum to the extent that they are capable. Presumably, this right should increase access to AP and for-college-credit classes for twice-exceptional students, providing equal educational opportunity to become prepared for postsecondary education appropriate to their level of capability.

Finally, for the twice-exceptional student to gain the most from his or her education, general education teachers and special education teams must develop the capacity to work more collaboratively. Special education remediation alone does not guarantee that the twice-exceptional student will be prepared for the postsecondary environment. Schools have a moral and legal obligation to provide an education to all special education students in the least restrictive environment. In the case of the twice-exceptional student, the least restrictive environment may include participation in AP or for-college-credit classes.

Appendix A

Parent Profile Sheet

Age of Student:
Grade:
Gender:

Describe Your Child

- Describe his/her strengths:
- Describe his/her needs:
- Does your child have an Individualized Education Plan (IEP) or 504 Plan?
- Do you believe your child is a twice-exceptional student (has a disability and an area of high ability)? If so, explain.
- Describe your child's work ethic:

Program and Services

- What special education services were recommended? Which of these services is (the student) currently accessing? If any services were declined, why?
- What are (the student's) postsecondary plans?
- What Advanced Placement/college-level-learning class(es) did your child take?

- Was participation in Advanced Placement/college-level learning part of a long-range academic plan?
- If they are taking (or took) Advanced Placement/college-level learning, was participation intended to be a transition to postsecondary education?
- Do you have other children who took Advanced Placement/college-level-learning classes?
- If so, how did this impact the decision for your child to participate in Advanced Placement/college-level-learning classes?

Appendix B

Teacher/Guidance Counselor Profile Sheet

Age:
Gender:

Degree Information

When did you graduate from college?
What degree(s) do you hold?
What certification(s) do you hold?

Experience

How long have you worked in this job?

- ~ At this school?
- ~ In other schools?

What is your average caseload of students?

Describe School Policies Regarding Advanced Placement Classes and College-Level-Learning Classes

- Who can recommend participation in
 - ~ Advanced Placement classes?
 - ~ College-level-learning classes?
- Who determines acceptance into
 - ~ Advanced Placement?
 - ~ College-level-learning classes?
- Regarding Advanced Placement and college-level learning, does your school have eligibility policies for participating? Are they guidelines or regulations? Are they consistently implemented? Do they vary depending on the subject?
 - ~ Advanced Placement?
 - ~ College-level learning?

- How many classes are offered at your school? What are the enrollment patterns (more students apply than spaces, classes are under enrolled, etc.)?

~ Advanced Placement?
~ College-level learning?

- Describe the philosophy of college-level-learning classes. Describe the characteristics of students that usually participate.
- Describe the philosophy of Advanced Placement classes. Describe the characteristics of students that usually participate.
- Does district have a gifted program/services for the gifted?

~ Is Advanced Placement perceived to be a gifted program?
~ Is College-level learning perceived to be a gifted program?

- Do you think students with disabilities have opportunities to access challenging curriculum in subject areas where he/she demonstrates ability?
- Do you think your child was placed in Advanced Placement classes (college-level-learning classes) based on his/her willingness to meet the expectations of challenging academic coursework?

What do you know about your school district's policies for Advanced Placement/college-level learning?

- Do school practices sort students with disabilities before they have the opportunity to enroll in Advanced Placement classes (college-level-learning classes)?

Thinking of the overall school culture (defined as district climate/attitude toward students with disabilities), do you think students with special needs are perceived as being capable of participating in Advanced Placement/college-level learning?

Appendix C

Interview Questions (Parent)

Please answer the following questions based on your experiences in and perceptions of your school district:

In your opinion, how do scheduling practices affect the student with a disability participating in Advanced Placement/college-level learning?

- How much influence do you have over course scheduling?
- Did the scheduled teacher influence you or your child's course to take an Advanced Placement/college-level-learning class?

What do you know about your school district's policies for Advanced Placement/college-level learning?

- What Advanced Placement/college-level-learning classes are available at your school?
- What are the differences between Advanced Placement classes and college-level-learning classes at your school?
- Are students placed in classes by their ability? Explain.

Do you think special education students are indirectly tracked as a result of school policies or the attitudes of district personnel?

- Do you think students with disabilities have the same access to prerequisite courses necessary for participation in Advanced Placement classes (college-level-learning classes)?

- Are students with disabilities able to keep up with the fast pace expected in Advanced Placement (college-level-learning classes)?
- Do you think general education teachers are aware of twice-exceptional students (students with a disability and an area of high ability)?

What modifications and supports exist that enable students with disabilities to be successful in Advanced Placement/college-level-learning classes?

- How do Advanced Placement classes (college-level-learning classes) accommodate the learning styles of students with disabilities?

What are the benefits of participating in Advanced Placement classes (college-level-learning classes) for students with disabilities?

- Does the curriculum prepare them to be successful in postsecondary education?
- Does participation help students with disabilities gain a realistic expectation of college? (What the college work load is like, what supports are available, etc.)

What do you identify as the barriers that prevent students with disabilities from participating in Advanced Placement classes (college-level-learning classes)?

What do you identify as the supports that assist students with disabilities to participate in Advanced Placement classes (college-level-learning classes)?

Appendix D

Interview Questions (Teacher)

Please answer the following questions based on your experiences in and perceptions of your school district:

How do you think the scheduling practices affect the student with a disability participating in Advanced Placement/college-level learning?

- How much influence do you have over course scheduling?
- Do you think students with disabilities have the same access to prerequisite courses necessary for participation in Advanced Placement classes (college-level-learning classes)?
- Do you think students with disabilities have opportunities to access challenging curriculum in subject areas where he/she demonstrates ability?
- In your opinion, are students placed in Advanced Placement classes (college-level-learning classes) based on their willingness to meet the expectations of challenging academic coursework?

What are your school district's policies for Advanced Placement/college-level learning?

- What do you think are the differences between Advanced Placement classes and college-level-learning classes at your school?
- What is your school's policy for participating in Advanced Placement classes (college-level-learning classes)?
- Do you think the disabled student's grade point average deters participation in Advanced Placement classes (college-level-learning classes)?
- Are students placed in classes by their ability? Explain.

Do you think special education students are indirectly tracked as a result of school policies or the attitudes of district personnel?

- How do remediation practices affect the disabled student's opportunity to participate in challenging academic curriculum? (conflicting singletons, no room in the schedule after remediation, etc.)
- Do you think students with disabilities have access to the same prerequisite courses necessary for participation in Advanced Placement classes (college-level-learning classes)? Do they take them? If not, why?

Thinking of the overall school culture (defined as district climate/attitude toward students with disabilities), are students with special needs perceived as being capable of participating in Advanced Placement/college-level learning?

- Are students with disabilities able to keep up with the fast pace expected in Advanced Placement (college-level-learning classes)?
- What special training is necessary for Advanced Placement/college-level-learning teachers when students with disabilities enroll in Advanced Placement/college-level learning?
- Does participation in Advanced Placement classes (college-level-learning classes) by disabled students dilute the curriculum for the gifted/advanced general education student?
- Are general education teachers aware of twice-exceptional students (students who have a disability and an area of high ability)?

What modifications and supports exist that enable students with disabilities to be successful in Advanced Placement/college-level-learning classes?

- How do Advanced Placement classes (college-level-learning classes) accommodate the learning styles of students with disabilities?
- Are students with disabilities able to keep up with the level of homework expected in Advanced Placement classes (college-level-learning classes)?
- What is the success rate of students with disabilities in Advanced Placement/college-level learning? How is success measured?

What do you think are the benefits to students with disabilities who participate in Advanced Placement classes (college-level-learning classes)?

- Does the curriculum prepare them to be successful in postsecondary education?
- Does participation help students with disabilities gain a realistic expectation of college? (what the college work load is like, what the available supports are, etc.)

What do you identify as the barriers that prevent students with disabilities from participating in Advanced Placement classes (college-level-learning classes)?

What do you identify as the supports that assist students with disabilities to participate in Advanced Placement classes (college-level-learning classes)?

Appendix E

Interview Questions (Guidance Counselor)

Please answer the following questions based on your experiences in and perceptions of your school district:

How do you think the scheduling practices affect the student with a disability participating in Advanced Placement/college-level learning?

- How much influence do you have over course scheduling?
- Do you think students with disabilities have the same access to prerequisite courses necessary for participation in Advanced Placement classes (college-level-learning classes)?
- Do you think students with disabilities have opportunities to access challenging curriculum in subject areas where he/she demonstrates ability?
- In your opinion, are students placed in Advanced Placement classes (college-level-learning classes) based on their willingness to meet the expectations of challenging academic coursework?

What are your school district's policies for Advanced Placement/college-level learning?

- What do you think are the differences between Advanced Placement classes and college-level-learning classes at your school?
- What is your school's policy for participating in Advanced Placement classes (college-level-learning classes)?
- Do you think the disabled student's grade point average deter participation in Advanced Placement classes (college-level-learning classes)?
- Are students placed in classes by their ability? Explain.

Do you think special education students are indirectly tracked as a result of school policies or the attitudes of district personnel?

- How do remediation practices affect the disabled student's opportunity to participate in challenging academic curriculum? (conflicting singletons, no room in the schedule after remediation, etc.)
- Do you think students with disabilities have access to the same prerequisite courses necessary for participation in Advanced Placement classes (college-level-learning classes)? Do they take them? If not, why?

Thinking of the overall school culture (defined as district climate/attitude toward students with disabilities), in your opinion, are students with special needs perceived as being capable of participating in Advanced Placement/college-level learning?

- Are students with disabilities able to keep up with the fast pace expected in Advanced Placement (college-level-learning classes)?
- What special training is necessary for Advanced Placement/college-level-learning teachers when students with disabilities enroll in Advanced Placement/college-level learning?
- Does participation in Advanced Placement classes (college-level-learning classes) by disabled students dilute the curriculum for the gifted/advanced general education student?
- Are general education teachers aware of twice-exceptional student (students who have a disability and an area of high ability)?

What modifications and supports exist that enable students with disabilities to be successful in Advanced Placement/college-level-learning classes?

- How do Advanced Placement classes (college-level-learning classes) accommodate the learning styles of students with disabilities?
- What is the success rate of students with disabilities in Advanced Placement/college-level learning? How is success measured?

What do you think are the benefits to students with disabilities who participate in Advanced Placement classes (college-level-learning classes)?

- Does the curriculum prepare them to be successful in postsecondary education?
- Does participation help students with disabilities gain a realistic expectation of college? (what the college work load is like, what supports are available, etc.)

What do you identify as the barriers that prevent students with disabilities from participating in Advanced Placement classes (college-level-learning classes)?

What do you identify as the supports that assist students with disabilities to participate in Advanced Placement classes (college-level-learning classes)?

Appendix F

Interview Questions (College Student)

How did you end up taking an Advanced Placement or for-college-credit class?

- Who encouraged you to enroll?
- Did a particular teacher recommend you for the class and/or suggest it to you?
- What were your parents' viewpoints?
- Did your guidance counselor influence your decision?
- Was enrolling in the class part of your transition plan?
- At what point in your high school career did you plan to take the class?

What accommodations or modifications did you require in the class?

- Were the modifications and accommodations outlined in your Individualized Education Plan (IEP) or 504 Plan made available to you?
- Were there any modifications and accommodations that you felt you needed that were not made available to you, which were not outlined in your IEP or 504 Plan?

Did the class help prepare you for college? How did it or why didn't it help?

What would you tell other students with disabilities about taking Advanced Placement or for-college-credit classes while they are still in high school?

What were the benefits of taking the class? Did it help you

- Learn to self-advocate?
- Gain an understanding of the pace and workload of college?
- Learn about your strengths and weaknesses and how they will affect your enrollment in college?
- Learn time management?
- Increase your confidence and comfort level with the transition to college?

Were there any disadvantages or negative effects of taking the class?

- Did it take too much time away from other classes?
- Was it too difficult? (Explain how)
- Were attitudes of classmates negative?

Did you successfully complete the class? How do you measure success?

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Bio

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