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## ABSTRACT

This qualitative research examined classroom behaviors and school perceptions of female students of color (Latina and African American) in single-gender and coeducational secondary-level special education placements for students with mild to moderate learning disabilities. Classroom observations and interviews were conducted with eight female special education students (ages 15-18) in both single-gender and coeducational special education classrooms on one urban school site servicing a large special education population. The study used classroom observations and focus-group interviews to gather information on the single-gender and mixed-gender programs. In addition, class assignments, homework, and other classroom documents were collected. In comparison to Latina and African American students attending a coed special education classroom, students in the single-gender special education classroom reported a greater degree of comfort and support from teachers and peers in class. Overall, girls in the single-gender class interacted with greater frequency, were observed on task during class, and produced more completed assignments than their counterparts in the coed classroom. Classroom participation was much higher for Latina students in the single-gender classroom compared to their coed classroom counterparts. However, notable differences in classroom participation were not observed between the two groups of African American students. (Contains 26 references.) (CR)

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**Female Students of Color in Special Education: Classroom Behaviors and Perceptions in Single-Gender and Coeducational Classrooms**

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## **Female Students of Color in Special Education: Classroom Behaviors and School Perceptions in Single-Gender and Coeducational Classrooms**

### *Abstract*

*This qualitative research examined classroom behaviors and school perceptions of female students of color (Latina and African American) in single-gender and coeducational secondary-level special education placements for students with mild to moderate learning disabilities. Classrooms observations and interviews were conducted with eight female special education students in both single-gender and coeducational special education classrooms on one urban school site serving a large special education population. In comparison to Latina and African American students attending a coed special education classroom, students in the single-gender special education environment reported a greater degree of comfort and support from teachers and peers in class. Classroom participation was much higher for Latina students in the single-gender classroom compared to their coed classroom counterparts. Notable differences in classroom participation were not observed between the two groups of African American students.*

Since the passage of PL 94-142, the Education for all Handicapped Children Act of 1975, students have been identified in greater and greater numbers for placement in special education. Of those placed in special education, boys are six times more likely than girls to be diagnosed with learning disabilities (LD) (AAUW, 1992; Epstein, Cullinan, & Bursuck, 1985). The disproportionate number of boys identified as ED and LD has resulted in special education classes in which boys outnumber girls by startling percentages. In special education classrooms where boys consistently outnumber girls, girls take fewer risks and perform less proficiently than boys (Grossman, 1998).

To date, over 600,000 students in California receive special education services. Between 1993 and 2000, the number of special education students in California increased by 41% (California DOE, 1999). Statewide, the ethnic enrollment of special education students is growing. Currently, 63% of California's special education students are ethnic minorities (California DOE, 2000). Recent projections indicate that approximately 26% of students with disabilities will leave high school before graduation (U.S. DOE, 1997). With the exception of Asian Americans, minority students in special education leave school with greater frequency than White students. The percentage of dropouts in special education by gender is 50.4% female and 49.6% male (McMillan, 1997), but this is deceptive because of the disproportionate number of boys in special education.

Research in special education seldom focuses on gender issues. The lack of research and programs focusing on the needs of girls, particularly female students of color, in special education may place them at risk for failure and dropping out of school (AAUW, 1998). Research on female students with mild to moderate disabilities is sorely

lacking. Given the overrepresentation of boys in special education classrooms, and the high risk factors facing female students in special education, a serious problem has emerged that must be addressed. Single-gender environments may provide one viable option to encourage school continuance for these students.

There is a growing body of literature documenting the benefits of single-sex schooling in the general education setting and a revived interest in single-sex education as a means of addressing the needs of at-risk students (Datnow, Hubbard & Woody, 2001; Datnow, Hubbard, & Conchas, 2001; Datnow & Hubbard, 2000; Hubbard & Datnow, 2000; Streitmatter, 1997; Streitmatter, 1999). The issue of single-gender education has not been examined in special education until recently (Madigan, 2002). The No Child Left Behind Act of 2001 (NCLB) contains a provision that authorizes local education agencies to use educational funds to implement single-gender programs ([www.ws.gov/legislation/ESEA02](http://www.ws.gov/legislation/ESEA02)).

Studies in general education settings suggest that female students in coeducational classrooms tend to receive less attention and have fewer opportunities for participation than male students (AAUW, 1998; Grossman, 1998; Riordan, 1990, Sadker & Sadker, 1995). Girls in single-gender classrooms show greater gains, both academically and affectively, than their counterparts in coeducational settings (Monaco & Gaier, 1992; Posnick-Goodwin, 1997; Riordan, 1990). Nationwide research examining the outcomes of ethnic group differences, in the context of single-gender settings compared to coeducational schools, yielded statistically significant results for Latina and African-American girls. Latina and African-American girls attending single-gender schools scored

higher on measures of leadership, academic achievement, and environmental control than their counterparts in coeducational schools (Riordan, 1994).

Streitmatter (1999), in a qualitative study of single-sex programs nationwide, included a classroom of girls identified for special education. The results of her research provide some evidence that the girls benefited in the areas of self-confidence and risk-taking. More importantly, interviews with the girls yielded compelling insights into their changed perceptions as learners. There was consensus that without the presence of boys in the classroom, girls were more focused on content and their learning experiences were heightened (Streitmatter, 1997; 1999).

The purpose of this research was to determine whether there were measurable differences in classroom behaviors and school perceptions of girls who attend single-gender and mixed-gender special education classes. Because of the high percentage of ethnic minorities in special education in California, this study examined the impact of single-gender special education classrooms for female students of color.

### **Method**

A qualitative research approach was used to investigate the impact of single-gender special education classrooms on female African American and Latina high school students identified as learning disabled in one urban school district in California. The study used classroom observations and focus-group interviews to gather information on the single-gender and mixed-gender programs. In addition, class assignments, homework, and other classroom documents were collected. The study investigated the impact of

single-gender special education classrooms for female students of color at the high school level. Research questions included:

How does classroom behavior differ for female students of color in secondary level single-gender special education classrooms and coeducational special education classrooms?

How do perceptions of school differ for female students of color in secondary level single-gender special education classrooms and coeducational special education classrooms?

#### *School Characteristics*

“The choice between us is chaos or community” Martin Luther King, Jr. (posted on the school site)

The campus where the study took place was a public coeducational high school located in an urban center in northern California. The high school was one of seven in the district and had the largest special education program district-wide. In June 2001, the high school was shut down due to unsafe conditions in the main campus buildings. In September 2001, the campus reopened in portables located on the school property. The special education classrooms were situated in one wing of the new campus. Students and teachers reported that they liked the new classrooms because of location (previous special education classrooms were scattered across the campus), better physical conditions, and air conditioning. The original building was built in 1927 and had been in a state of disrepair for some time.

The special education program had five special day classrooms, defined as classes in which students with mild to moderate learning disabilities spent 50% or more of their day in the same classroom. Special education students were placed into either single-gender or coeducational classes in their freshman year and remained with the same group of students and teachers throughout their placement in the program or until high school graduation. According to the program administrator, placement in single-gender and mixed-gender classrooms was not based on academic or behavioral criteria. Girls were randomly placed into classes after being identified for special education services. Some students were mainstreamed into general education courses during the school day. According to all reports, the program provided a sense of continuity and family for the students and teachers. In this study, the coed classroom teacher is a White male with eleven years of teaching experience and the single-gender classroom teacher is a White female teacher with two years of teaching experience.

### *Sample*

The participants for this study included eight female special education students attending either single-gender special education (SGSEC) or coed special education classes (SEC). There were four female students in the coed class; two Latina and two African-American. Their ages ranged from 15 to 18 years old. Four of thirteen students in the single-gender class with similar to the demographics of the female students in the coed class were randomly selected to participate in the study. Two students are Latina and two are African-American. The SGSDC was also multi-aged. With the exception of one



Latina student, all of the participants in this study are from low income families; three students reported that either one or both parents did not graduate from high school.

### *Procedure*

#### *Focus Group Interviews*

Female students from single-gender and mixed-gender special education classrooms were interviewed in homogeneous (single-gender or mixed-gender) focus groups. Students were interviewed in two focus groups of four participants. A transcription from each interview was generated to record the responses. Interview questions addressed the research questions pertaining to classroom behaviors and school attitudes.

#### *Interview Protocols*

The interview protocols from the single-gender study were adapted with permission of Dr. Amanda Datnow for the purposes of this study. The instruments were originally developed by the research team from Johns Hopkins University based on their involvement in a three-year longitudinal study of California's single-gender academies (Datnow, Hubbard, & Woody, 2001; Datnow, Hubbard, & Conchas, 2001; Datnow & Hubbard, 2000; Hubbard & Datnow, 2000). The protocols were later piloted and adapted for use in the single-gender and mixed-gender special education environment (Madigan, 2002).

#### *Observations*

Over the span of four months, the researcher and a graduate assistant observed in both mixed-gender and single-gender classrooms two days a week (four hours per visit) as a participant/observer resulting in over 25 classroom observations. In addition to

instructional time, the observations included lunchtime, breaks, and before and after school interactions.

The researcher and graduate assistant utilized descriptive field notes (Bogdan & Biklen, 1998) and a rubric to measure classroom behaviors. The rubric was designed by the researcher to measure classroom behaviors, such as answering teacher initiated questions, hand-raising during discussions, asking questions, and completion of in-class and homework assignments during classroom observations. The rubric allowed the researcher to be focused and systematic throughout the observation process. As an observer, the information obtained through the observations supported the data collected from the focus group interviews and individual interviews with the students. Observations of the girls in the classrooms also provided specific information pertaining to the classroom behaviors and attitudes of the students.

#### *Inter-Rater Reliability*

A two hour session was conducted for training the graduate assistant to use the rubric for measuring classroom behaviors. Training continued until satisfactorily high levels of agreement were obtained on a pilot test of 1 female special education student. Rating equivalence, defined as agreement between coders, was established by the percent of agreement between the researcher and the graduate assistant. The inter-rater reliability coefficient for observed classroom behaviors on one female special education student was .89.

#### *Data Analysis*

The transcribed interviews, field notes, information from the classroom rubric, and documents were organized according to dates, place setting, and individual and focus group interviews. The researcher reviewed the data to get a sense of the overall picture emerging from the various information sources. The classroom rubric was used to measure the number of times students demonstrated behaviors such as hand-raising, answering and asking questions, and participating in class discussions. Five classroom behaviors were observed, recorded, and tabulated to provide a comparison between female students in the single-gender special education classroom and the coeducational special education classroom. Additionally, interview questions directed to the teachers of the coed and single-gender classrooms were designed to triangulate and verify the observation of these behaviors.

The notes and data collected from the focus group interviews and classroom observations were transcribed to provide information related to school perceptions of the students. Transcribed data were coded according to the emergent themes. Detailed description and in-depth quotations were included to provide understanding and insights into the themes that arose throughout the data analysis process. The researcher looked for quotations and observations that fit together to highlight a particular theme, issue, or idea. The data was labeled and indexed to organize the material into meaningful and manageable categories. Questions that developed from the transcribed reports were presented to students on an as need, individual basis in an interview format to verify data previously collected. These interviews were transcribed, read, and tallied. A second analysis of

results was developed from the transcribed data to identify other themes that emerged from the study.

### *Triangulation of the Data*

In order to support the validity and credibility of the findings, a variety of triangulation methods were employed (Lincoln & Guba, 1985). A range of data sources were used in the study. Different people representing various status positions were interviewed. These included special education teachers of single-gender and mixed-gender classrooms, and program administrators. Additionally, participant observations were conducted by two evaluators, a trained graduate assistant and the primary researcher. Finally, multiple methods were utilized to study the problem, including focus group interviews, classroom observations, data collected from the classroom behavior rubric, and documents collected from the site, such as class assignments, school communication bulletins, and school philosophy.

### **Results**

The study examined how classroom behaviors differed for girls in secondary level single-gender special education classrooms (SGSEC) and coeducational special education classrooms (Coed SEC). Classroom behaviors were measured by observations of classroom activities, such as answering teacher-initiated questions, hand-raising during discussions, asking questions, and completion of in-class and homework assignments.

Tables 1 and 2 summarize the results for each classroom in terms of frequency counts of observed classroom behaviors. Classroom behaviors were analyzed according to class type and student ethnicity. The number of female students observed in each class was

unequally distributed due to the fact that only four girls were enrolled in the coed class in contrast to 13 in the single-gender class. For the purposes of this study, the Classroom Observation rubric was used to observe four girls, on six separate occasions, in the single-gender class, and four girls in the coed class, on six separate occasions, for 30 minute intervals. The students were randomly selected for observation from the single-gender to class to match the ethnicity of the students in the coed class. In the single-gender class, students 1 and 2 were Latina and students 3 and 4 were African American. Similarly, in the coed class, students 1 and 2 were Latina, and students 3 and 4 were African American (See Tables 1 & 2).

**Table 1: Frequency Count Classroom Behaviors of Students in Single-Gender Special Education Classroom (SGSEC)**

BEHAVIOR: SG CLASS	S1- L	S2- L	S3- A	S4- A	Total
1. Hand raising independently/ prompted by teacher	2	4	3	2	11
2. Answers questions prompted by teacher	8	13	14	16	51
3. Interacts in classroom discussion	15	17	22	13	67

4. On task during class (i.e. taking notes, reading, seatwork)	6	8	12	4	30
5. Turns in completed assignments	3	3	3	3	12
Total Number of Observable Class Behaviors	34	45	54	38	171

Key: S1-L, S2-L, S3-A, S4-A

Students # 1-L = Latina Student in SGSEC; Student #2-L = Latina Student in SGSEC  
 Student # 3-A = African American Female Student in SGSEC; Student # 4-A = African American Female Student in SGSEC

**Table 2: Frequency Count of Classroom Behaviors of Students in Coed Special Education Class (Coed SEC)**

BEHAVIOR: COED CLASS	S1- L	S2- L	S3- A	S4- A	Total
1. Hand raising independently/ prompted by teacher	2	6	12	14	34
2. Answers questions prompted by teacher	2	5	10	14	31

3. Interacts in classroom discussion	1	6	11	14	32
4. On task during class (i.e. taking notes, reading, seatwork)	4	3	7	12	26
5. Turns in completed assignments	N/O	N/O	N/O	N/O	N/O
Total Number of Observable Class Behaviors	9	20	40	54	123

Key: S1-L, S2-L, S3-A, S4-A

Students # 1-L = Latina Student in Coed SEC; Student #2-L = Latina Student in Coed SEC  
 Student # 3-A = African American Female Student in Coed SEC; Student # 4-A = African American Female Student in Coed SEC  
 N/O = Behavior Not Observed

Behavior 1: Handraising independently and/or prompted by teacher

Handraising refers to behavior on the part of the student to raise her hand during a class discussion or to receive assistance from the teacher. The total frequency count for two Latina SGSDC students on handraising behavior, over the course of six observations, was six. The total frequency count for two Latina students in the coed class for the same amount of time, during a similar class period (Study Skills/ Language Arts), was 8. The frequency count for two African American female SGSDC students during the same observation period was 5. The two African American female coed students were demonstrated handraising behavior 26 times. The total frequency count for Behavior 1

(handraising) was 11 in the single-gender class, and 26 in the coed class over a six-week period of both the single-gender and coed classrooms.

Students in the single-gender class raised their hands 301% less frequently than their counterparts; it is important to note that the teacher in the coed classroom requires students to raise their hands in response to teacher-initiated and student-generated questions, whereas the single-gender classroom teacher does not have this rule. Students in the single-gender classroom are encouraged to speak out in class during class discussions. The Latina and African American single-gender students had comparable frequency rates on this behavior.

#### Behavior 2: Answers questions prompted by teacher

Question-answer behavior refers to action on the part of a student to directly respond to a question posed by the teacher to the class as a whole or to the individual student. The total frequency count for two Latina SGSEC students on question-answer behavior, over the course of six observations, was 21. The total frequency count for two Latina students in the coed class for the same amount of time, during a similar class period (Study Skills/ Language Arts), was 7. The frequency count for two African American female SGSEC students during the same observation period was 30; the two African American female coed students demonstrated question-answer behavior 24 times. The total frequency count for Behavior 2 (question-answer) was 51 in the single-gender class, and 31 in the coed class over a six-week period of both the single-gender and coed classrooms.



Overall, students in the single-gender class demonstrated question-answer behavior with 61% more frequency than their coed counterparts. Latina students in the coed classroom were observed answering a question in class only 7 times over a six week period.

### Behavior 3: Interacts in classroom discussion

Classroom interaction behavior refers to verbal participation on the part of a student during any kind of class discussion, formal or informal. Formal discussion is defined as discussion related to academic or content areas of instruction; informal discussion refers to discussion that takes place between students and/or the teacher on topics such as movies or weekend activities. The total frequency count for two Latina SGSEC students on classroom interaction behavior, over the course of six observations, was 32. The total frequency count for two Latina students in the coed class for the same amount of time, during a similar class period (Study Skills/ Language Arts), was 7. The frequency count for two African American female SGSEC students during the same observation period was 35; the two African American female coed students demonstrated classroom interaction behavior 25 times. The total frequency count for Behavior 3 (classroom interaction) was 67 in the single-gender class, and 32 in the coed class over a six-week period, during 12 (six per class) 30-minute observations of two classrooms; single-gender and coed.

Classroom interactions were recorded with 201% greater frequency in the single-gender classroom compared to the coed classroom. In the SGC, frequency counts were evenly distributed between Latina and African American students. The Latina students in

the coed classroom interacted with 357% less frequency than their African American class peers.

#### Behavior 4: On task during class

On task behavior refers to nonverbal behaviors such as taking notes, working on class assignments or reading class materials. The total frequency count for two Latina SGSEC students for on task behavior, over the course of six observations, was 14. The total frequency count for two Latina students in the coed class for the same amount of time, during a similar class period (Study Skills/ Language Arts), was 7. The frequency count for two African American female SGSEC students during the same observation period was 16; the two African American female coed students demonstrated on task behavior 19 times. The total frequency count for Behavior 4 (on task during class) was 30 in the single-gender class, and 26 in the coed class over a six week period in both the single-gender and coed classrooms.

Overall, on task behavior was observed with comparable frequency in the single-gender and coed class, however, coed Latina students had 271% fewer recorded incidents of on task behavior than their African American coed classmates. Observation notes indicate that coed Latina students often had their heads on their desks, asked to go to the bathroom for extended periods of time, or drew pictures. The teacher usually did not comment on these behaviors.

#### Behavior 5: Turns in completed assignments

Completed assignments refer to teacher directed activities that result in a final product collected by the classroom teacher. The total frequency count for two Latina

SGSEC students on assignment completion behavior, over the course of six observations, was 6. The total frequency count for two Latina students in the coed class for the same amount of time, during a similar class period (Study Skills/ Language Arts), was not observed. The frequency count for two African American female SGSEC students during the same observation period was 6; the two African American students in the coed class were not observed on this behavior. The total frequency count for Behavior 5 (turns in completed assignments) was 12 in the single-gender class. Over a six-week period, students in the coed classroom were not observed turning in any completed assignments.

The single-gender students each turned in one completed assignment during three of six class periods observed (1 assignment per student/per class). An example of one completed assignment observed was a report turned by student pairs as part of a history unit of study. The single-gender students had specific assignments listed on the board during each class session, whereas the coed students worked individually on “classwork packets” (e.g. math worksheets, question-answer worksheets, geared to grade level of individual student). Classwork packets are used by some special education teachers as a method for giving academic work over a long period of time in an individualized format. The packets are usually turned in at various points in the semester or when they are completed. Students generally work at their own pace.

### *Perceptions of School*

The interviews with students examined how school perceptions differ for girls in secondary level single-gender special education classrooms and coeducational special education classrooms. School perceptions were measured by general affective statements

indicating positive or negative feelings toward school reported in focus group and individual interviews. School perceptions included relationships between students, teachers, and peers, and student perceptions of the school environment. Focus group interview data were organized into two categories; student perceptions of the environment in class and student perceptions of disabled and non-disabled peers.

### *Perceptions of the Special Education Environment*

Students had strong views about their placement in coed and single-gender special education classrooms. There appeared to be contradictions in their feelings about special education. On one hand, girls felt they were being helped by the individualized attention and lower students numbers in special education classes. They also experienced more success because of the modified instruction and adaptations of the curriculum. Special education classes, whether coeducational or single-gender, were perceived as a place to catch up on work assigned in mainstream classes and to learn academic skills without feeling intimidated by non-disabled peers. On the other hand, girls in both classes expressed shame and frustration about the misconceptions other students have about what it means to be a learning-disabled student in special education. The following excerpt from an interview with single-gender students highlights this theme:

Researcher: How do you feel about being in special education?

Latina SGSEC Student: At first, I was kind of ... ashamed, I really didn't want to be in special education (special day class at the high school) because of the stories, lies, and the rumors that I heard about it. But special ed is not that way at all; it's a place where you get attention ... one on one attention. It's not that we're doing anything different. We're smart and intelligent too. We just have a

couple of learning disabilities and we need help with them. There's nothing wrong with special ed.

Latina SGSEC Student: I feel more comfortable, because, like she said, one on one, not one teacher with thirty kids... In the other classes, you have to wait for the other kids to finish with the teacher and then you don't get the answer when the bell rings. In here you can stay over lunch ... and if the teacher is with another student, they come back to you. In other classes, they do sometimes, but with a lot of kids they forget.

Researcher: What do kids outside of the class say about special education?

African American SGSEC Student: They'll say, "Is that (class) for dumb people?"

Latina SGSEC Student: Yeah, that's what I don't like. They make fun of you and say, "It's going to be all girls, and you don't have any guys."

### *Student Perceptions of Disabled and Non-disabled Peers*

The challenges of disability are compounded for girls in coed special education as a result of the alienation they experience from non-disabled peers, and the teasing and namecalling that occurs from male students in their special education classes. Girls in single-gender SECs report feeling supported and encouraged by their teacher and peers. This, however, is not the experience of girls in coed special education.

Latina Coed SEC Student: Everybody from this school thinks that special ed is for dumb people...

African American Coed SEC Student: Retarded people ...

Latina Coed SEC Student: People think we're retarded, but we're not ... it's just a class, it's a normal class.

African American Coed SEC Student: But what I don't understand is that my friends know I'm in special ed, and they don't have a problem with it. But when I am with the (boys), they'll say "You're in special ed, huh?" I'll say, "Yeah, so?" They'll say, "You're dumb." I'll say, "You're in it, too, so what's the

big point?” That’s what gets on my nerves.

### **Discussion**

This study sought to examine the identifiable differences between the classroom behaviors and perceptions of female students of color attending single-gender and coeducational special education classes, as well as comparing these results with earlier studies investigating the impact of single-gender programs on general education students in public school settings (Datnow, Hubbard & Conchas, 2001; Datnow, Hubbard & Woody, 2001; Streitmatter, 1994, 1999).

The differences in classroom behaviors of female students attending single-gender and coed special education classes suggest that single-gender environments provide an atmosphere conducive to participation in class and completion of schoolwork. In this study, classroom behaviors were measured by observations of classroom activities, such as answering teacher-initiated questions, hand-raising during discussions, asking questions, and completion of in-class and homework assignments. Overall, girls in the single-gender class interacted with greater frequency, were observed on task during class, and produced more completed assignments than their counterparts in the coed classroom. However, when comparing “intra-gender” differences between the classroom behaviors of African American and Latina students in the coed and single-gender classroom, Latina students interacted with far greater frequency in the single-gender environment than their counterparts in the coed class. The African American students, on the other hand, did not demonstrate notable differences in classroom behaviors based on class placement.

Latina students attending the single-gender class articulated the contrast of their previous experiences in coed single-gender classrooms in the following excerpt:

Latina SGSEC Student: I never really got good marks (grades)... I was not participating, and that was because I felt like I couldn't express myself ... now I participate.

Latina SGSEC Student: Me too. I can't express myself when I'm in front of guys, because they start laughing or ... make fun of you; like how you speak or how you say something. When it's all girls, they realize they have the same problem.

An African American student in the coed class offered a different point of view:

African American Coed SEC Student: In the last two years that I've been in this class, this is the most girls that have ever been in the class, so it's different to me. Most of the time I'm with guys anyway, so it really doesn't faze me as much, I could care less really. I'm still gonna say what I want to say, regardless of who's around, whether you're a guy or a girl.

Equity research has just begun to explore the diversity of girls, as opposed to the presentation of girls as a uniform group. Since 1992, research on girls has shifted from an assumption of homogeneity to an in-depth focus of differences among girls or "intra-gender differences" (AAUW, 1998). The AAUW publication (1992), *How Schools Shortchange Girls*, reported that White and Latina girls experienced a decline in self-esteem during adolescence, while African-American girls did not. Across ethnic groups, the self-esteem of Latinas declined the most severely. Recent work is in progress to explore the differences among girls in public-school settings within the context of ethnicity and socioeconomic background (Rogers & Gilligan, 1998). These findings may provide some insights into the varying participation rates between the two groups of female students in this study.

It is well documented in the literature that female students in coeducational classrooms receive less opportunity to participate and less feedback from teachers than their male students (Grossman, 1998; Riordan, 1990; Sadker & Sadker, 1995). These conditions are heightened for female students with learning disabilities for three reasons:

- The number of male students in special education classrooms exceeds female students by 6 to 1 (Epstein, Cullinan, & Bursuck, 1985)
- Female students referred to special education usually have more severe learning disabilities than boys, which increases their difficulty to participate in class (Callahan, 1994)
- Male students tend to bully female students in special education classes (Madigan, 2002)

Data from the present study suggest that single-gender special education environments provide an atmosphere for greater class participation, opportunity for increased learning and productivity, and greater completion rates of schoolwork for female students.

The students in the single-gender special education class remarked with consistency on the comfort level they experienced in their classroom, as evidenced in the following excerpt:

Researcher: What are some of the benefits of attending an all girl's class?

Latina SGSEC Student: It's comfortable to be in here. You have friends and people care about you.

Researcher: How do you think the other girls feel about being in here?



African American SGSEC Student: They feel comfortable...

Latina SGSEC Student: You just feel good being in this class... Like if you want talk or get help, you can.

This finding is not surprising given the dynamics that take place between male and female students in coed special day classrooms. Coed classroom students expressed frustration toward their male peers and teacher for various reasons, including the distractions they experienced in the coed class. The following excerpt highlights this sentiment:

African American Coed SDC Student: They (the boys) are always distracting me, but I try not to let it get to me. If I'm being distracted, I'm trying to put myself in a position to where I'm not gonna be distracted ... but Mr. K. (male coed teacher}distracts you a lot, too.

African American Coed SDC Student: Yes, that's true.

Latina Coed SDC Student: They (the boys) are always talking across (the room). They just talk because they have a mouth, but when you tell them be quiet, they won't. They'll just get louder and louder ...

In the 1992 report by the American Association of University Women, *How Schools Shortchange Girls*, researchers reported that male students receive more positive and negative attention than females from teachers in the classroom. This atmosphere places girls at risk for negligence, underachievement, and ultimately dropping out (AAUW, 1992). These findings are clearly reflected in the experiences of the coed SEC girls in this present study.

Both groups of students in single-gender and coed classrooms shared similar perceptions of the experience of being a special education student. The special education classroom was viewed as a place to get needed time and support to do schoolwork that

they were unable to keep up with in mainstreamed classes. They voiced concerns about the misunderstandings non-special education peers had of their special education placements. While appreciative of the opportunities afforded them in special education classes, such as modified instruction and adaptations to the curriculum, they were frustrated and at times, ashamed at being labeled as “retarded” or “dumb.”

Gender is a complex issue for female students in single-gender and coed special education classes. Disability further complicates gender identity for these students. Not only do girls experience put downs from male peers for their gender, but male students in special education also make derogatory comments about the girls’ disabilities. The coed special day students describe their experiences with male classmates in the following dialog:

African American Coed SEC Student: ...if we try to say something, they (the boys) are like, “Shut up, it’s not funny.” It’s like they just cover you up, like you’re gone. They talk about like how fine girls are. The girls in this class don’t talk a lot, ‘cause we mostly do work, but the guys... they stand up, they walk around, they want to go to the bathroom.

Latina Coed SEC Student: I have a boyfriend and (male student) says, “So when are we gonna go play around?” I say, “I have a boyfriend.” He’s like, “Did you give it to him already?”

Later a student discussed the namecalling that occurs in class:

African American Coed SEC Student: I mean obviously they (the boys) are dumb themselves for even trying to tell me I’m retarded or dumb.... like (boys) sometimes say “Yeah you’re retarded; that’s why you’re in this class.” I’m like, excuse me, speak for yourself, I am not retarded, you might be, but I am not.

## Conclusions

In this study, female students attending single-gender special day classrooms have greater rates of classroom participation, schoolwork productivity, and interaction with the classroom teacher than students attending coed special education classrooms. Special education classrooms, single-gender and coeducational, may provide vital support for female students in the areas of instructional support and curricular adaptation, despite the misconceptions of peers about the function of special education. Furthermore, gender and disability are complex issues for girls in coed and single-gender special education classes that should be addressed by teachers and administrators of special education programs as well as researchers in the field. Finally, “intra-gender” differences between groups of girls is an understudied issue in special education and merits further inquiry.

### Implications for Special Education: Research and Practice

The small sample size and classroom teaching styles of the teachers in this study are clear limitations that require replication. This study suggests that classroom style of individual teachers in coed and single-gender special education classes merits further examination. In this study, students in the single-gender environment clearly benefited from the relaxed, collaborative atmosphere. Discussion was encouraged and rules about classroom behavior, such as eating in class and handraising during discussions, were laid aside. The classroom style of the male coed classroom teacher was more structured and laden with rules, such as handraising during class discussions and staying in one’s seat. Many of these rules were for the benefit of the teacher to control boys’ behavior and

were detrimental to the female students in class. This study supports the findings of Streitmatter (1999) that provide qualitative insights into the environmental factors that contribute to success of girls in single-gender classes. Female students in special education classes benefit academically from an informal, cooperative environment. Despite the fact that African American girls participated in both coed and single-gender classrooms, the interview data indicates that these students were more comfortable and less distracted in the single-gender environment. Additionally, intra-gender differences between ethnically diverse groups of female students represented in special education classrooms is another important topic for future research.

Teacher beliefs about gender in the classroom is another area for suggested future research. Specifically, interactions between students and classroom teachers as they relate to gender, teacher beliefs about girls in special education, and special education teachers' management of the classroom in single-gender and coed environments are all important topics for investigation.

A more fundamental issue raised by this study is the legal debate surrounding single-gender public school programs. Given the recent Notice of Intent to Regulate (NOIR) by the U.S. Secretary of Education to provide more flexibility for single-sex classes and schools, inquiry into such programs is timely ([www.ed.gov/PressReleases/05-2002/05082002.html](http://www.ed.gov/PressReleases/05-2002/05082002.html)). In special education, the high number of male students identified as disabled often leads to the establishment of single-gender classes. This is not intentional but instead a result of the low number of girls identified for special

education services. This issue of over-identification of male students in special education is beyond the scope of this research, but merits further examination.

### **Conclusion**

The findings presented here argue for careful examination of the specific needs of female students in special education programs, particularly female students of color. The results of this study, together with other studies of single-gender public school programs for at-risk students (Datnow, Hubbard, & Woody, 2001; Streitmatter, 1999) suggest that ethnically diverse female students may benefit greatly from participation in single-gender special education programs. Female students of color in special education are at serious risk for school failure and ultimately dropping out. Within six months of the completion of this study, one Latina and one African American student in the coed class had dropped out of school, one Latina student moved out of the district, and the remaining African American student was transferred to the single-gender class. The students in the single-gender class, to date, have remained intact. The issue of gender in special education is understudied and time critical. It is crucial that future research provides further examination along this line of inquiry.

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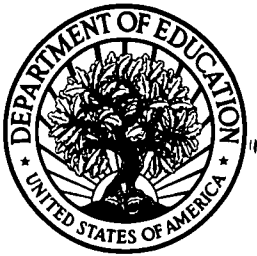
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