

# Interim Report on the Study of Minority and At-Risk Student Representation in Honors, AP, and Academically Gifted Programs

## *Submitted to:*

The Commission on Improving the Academic  
Achievement of Minority and At-Risk Students  
*and*

The Joint Legislative Education Oversight Committee

*January 15, 2001*



Public Schools of North Carolina  
State Board of Education • Department of Public Instruction  
Division of Accountability Services

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# **Study of Under-representation of Minority and At-Risk Students in Advanced Courses and Academically Gifted Programs: Status Report**

**January, 2001**

## **Closing the Gap Legislation (Session Law 2000-67, Sec. 8.28(b))**

The legislation directs the State Board of Education to study the under-representation of minority and at-risk students in honors classes, advanced placement (AP) classes, and academically/intellectually gifted (AIG) programs and whether this under-representation contributes to the gap in student achievement. Further, the study examines the identification and placement criteria used to identify students for these programs and, to the extent feasible, whether low academic expectations or certain instructional practices (e.g., tracking) contribute to under-representation.

## **Overview of Study Structure**

The Evaluation Section of the NC Department of Public Instruction has coordinated an internal evaluation planning team with staff from the Division of Instructional Services, the Division for Exceptional Children, and the Division of Accountability Services. Preliminary evaluation questions (Attachment A) were identified to submit to contract evaluators. It will be necessary to estimate answers to some of these questions by case study visits, as we are not able to track students across all courses and across years in our databases at this time.

The evaluation for this study has been contracted to UNC-Chapel Hill, with Dr. William Darity, Boshamer Professor of Economics and Sociology, as lead researcher. He has assembled the following research team:

- ◆ Dr. Karolyn Tyson, Department of Sociology, UNC-CH
- ◆ Dr. Domini Castellino, research scholar, Child and Family Research Center of the Sanford Public Policy Institute at Duke University
- ◆ Dr. Ron Howells, Mars Hill College and expert on academically gifted education.

## **Study Components**

The study consists of several components and levels of analyses. Analysis of extant data obtained from the Department on enrollments by ethnicity, gender, and grade level in honors and AP courses will be examined for the extent to which various ethnic groups are represented in these courses in high schools relative to their representation in the student population at large. Existing AIG enrollment data at the state level are available only for school districts, and additional information by school is being obtained on a survey form. Factors that might predict likelihood of enrollment in advanced courses and AIG will be considered through regression and other means using data from testing databases.

A short survey has been distributed to every school in the state to obtain basic program information. The Elementary/Middle Schools survey focuses primarily on the AIG program, given that few honors

courses are likely to be found in middle school. The High School Survey focuses on honors and AP courses. These courses are also the vehicles through which AIG-identified students are typically served in the secondary grades. Survey questions ask about screening and identification procedures for these programs, including:

- any programs developed to support students that might not otherwise qualify for the programs,
- how AIG programs are structured,
- which students are most likely to decline opportunities to enroll in these courses/programs, and
- how the school's regular instructional program is arranged (i.e., how students are generally grouped for all courses).

If possible, information from feeder middle schools to the high schools may help look at sequences of type of groupings and opportunities for students. Copies of the two surveys are included as Attachment B.

Several schools at each grade span (i.e., elementary, middle and high) will be selected for case study visits in January and February 2001. Both quantitative data and survey data may be used to help select schools to be visited. These case studies will facilitate more in-depth data collection from students, teachers, and administrators, allowing greater examination of attitudes of each group and how the process of entry and selection into AIG, honors, and AP courses works in the schools.

### **Current Status of Enrollment by Ethnicity**

Some preliminary data are available with respect to enrollment in honors and AP courses and AIG programs. These results are based on archival DPI data sources for the 1998-99 school year. Charts detailing these findings are included in Attachment C. A summary of those findings is given below.

Enrollments in Honors Courses. During 1998-99, Asian and White students appear to have enrolled in honors courses at a higher rate than other students.

Enrollments in AP Courses. Both White and Asian students enrolled in AP courses at a higher rate than students from other ethnic backgrounds did during 1998-99.

Enrollment in AIG Programs. During 1998-99, White students appeared to be over-represented in AIG programs while Black and Hispanic students were under-represented, as compared to the overall student population in grades K-12. The percentage of American Indian and Asian students enrolled in AIG programs are more similar to their overall student population percentages.

### **Reporting Dates**

An interim report to the Committee on Improving the Academic Achievement of Minority and At-Risk Students (Academic Achievement Committee) and the Joint Legislative Education Oversight Committee on January 15, 2001. The final report with findings and any recommendations will be due on May 15, 2001, which requires a final report by early March in order to proceed through the State Board of Education process. As much of the analyses as possible will be completed in time for these reporting dates. If additional analyses seem desirable, contractors will continue that work and will submit a follow-up report as soon as possible.

## Attachment A

Preliminary Evaluation Questions for the Opportunity to Learn  
Study:

Under-Representation of Minority Students in  
Advanced Placement and Honors Courses and Gifted  
Programs

**Opportunity to Learn and Minority Achievement:  
Participation in Honors, AP, and AG classes**

**[Preliminary Evaluation Questions]**

Data Source	Preliminary Evaluation Questions for Honors and AP
<p>State</p> <p>State &amp; Local</p> <p>State</p> <p>Local/some State</p> <p>Local/State?</p> <p>State &amp; Local?</p> <p>State</p> <p>Local</p> <p>State</p> <p>State</p> <p>Local/Survey</p>	<p><u>What do the data look like? What do they imply about what students have which opportunities and when they have them?</u></p> <ol style="list-style-type: none"> <li>1. How well does the ethnic composition of high school course options track the school demographics (LEA/State demographics)?</li> <li>2. What percent of high school students take various AP courses? Are there differences by ethnicity?</li> <li>3. How are the demographics of honors and AP courses different from overall school demographics?</li> <li>4. What percent of students in AP courses take the AP exam? Are there differences by ethnicity? Is an AP exam offered for students in all schools? Who pays the fee for that exam?</li> <li>5. What differences exist in academic performance (GPA) by ethnicity among AP and honors students?</li> <li>6. What differences exist in the grade levels at which different ethnic groups take certain courses? How will these differences affect opportunities for higher level courses? What are EOC scores by grade level?</li> <li>7. What are the self-reported career expectations for students who take Algebra at different grade levels?</li> <li>8. Do 8<sup>th</sup> grade EOG scores differ among students in different “levels” or “tracks” of courses? Selected EOC courses?</li> <li>9. What is the representation by ethnicity in 8<sup>th</sup>-grade Algebra? What were the 7<sup>th</sup>-grade EOG math scores for those students? What are their subsequent Algebra EOC scores?</li> <li>10. How many students (by ethnicity) who take Algebra I in 8<sup>th</sup> grade go on to take high-level math courses in high school? Four years of math?</li> <li>11. What is the relationship between school demographics and school course offerings/course-taking opportunities?</li> </ol>
<p>Survey</p> <p>Survey/focus groups/interviews</p> <p>Survey (State?)</p> <p>Focus groups/interviews</p>	<p><u>What expectations are implied in state/district/school policies and practices?</u></p> <ol style="list-style-type: none"> <li>12. What criteria for registration do LEAs have for different AP courses?</li> <li>13. What criteria do counselors consider when advising students about course taking?</li> <li>14. What course levels (tracks) does the school have for different courses? Core vs. higher level?</li> <li>15. What are students’ perceptions about access to higher level courses? What advice have they gotten regarding enrolling in these courses?</li> </ol>

Survey	16. What are school/district policies regarding access to/criteria for honors and AP courses? Do some schools allow for open enrollment?
Survey?/Case studies	17. Do schools/LEAs that have more open enrollments for honors and AP (assuming we find some) have lower test scores? What are other impacts of a more open policy, if any?
Case studies	18. Can we identify school with more proportional representation in these courses. and/or good outcomes across ethnicity? What are these schools doing to succeed in these areas?

<b>Data Source</b>	<b>Preliminary Evaluation Questions for Academically Gifted</b>
Survey	1. What are the local procedures for AG identification? Do they include ethnicity in some way as a consideration?
State	2. Are there differences in minority and majority EOG performance among AG students?
Local?	3. Are there differences in minority and majority academic performance (grades, etc.) among AG students?
Case Studies?	4. How have LEAs that have more representative demographics in their AP programs achieved that balance? (good practices?)

## Attachment B

### School Surveys Regarding AIG Programs and Honors and Advanced Placement Courses:

- Elementary and Middle Schools Survey
- High School Survey



# NCDPI ELEMENTARY AND MIDDLE SCHOOLS AIG SURVEY

LEA: _____	School: _____
Person completing survey: _____	Title: _____
Phone Number: _____	School Code: _____

## Programs for Students Identified as Academically or Intellectually Gifted (AIG)

1. (a) Do you offer any honors courses in your middle grades (6-8)?

\_\_\_\_\_ Yes \_\_\_\_\_ No

(b) If yes, list course(s) offered: \_\_\_\_\_

(c) If yes, check grade level(s) where offered: 6<sup>th</sup> \_\_\_\_\_; 7<sup>th</sup> \_\_\_\_\_; 8<sup>th</sup> \_\_\_\_\_.

2. Do you have any AIG identified students in your school?

\_\_\_\_\_ Yes \_\_\_\_\_ No [If no, go to item # 5.]

3. How is your **program for AIG structured**? [Check all that apply.]

- \_\_\_\_\_ Resource room
- \_\_\_\_\_ Full-time special class (e.g., math and language arts)
- \_\_\_\_\_ Heterogeneous regular classrooms
- \_\_\_\_\_ Flexible grouping across grades
- \_\_\_\_\_ Full-time consultative program
- \_\_\_\_\_ Part-time consultative program
- \_\_\_\_\_ Acceleration [Explain] \_\_\_\_\_
- \_\_\_\_\_ Other [Please specify] \_\_\_\_\_
- \_\_\_\_\_ Other [Please specify] \_\_\_\_\_

4. Please list the number of students from each grade level in your school who are currently enrolled in the AIG program by ethnicity and gender. If none, write zero (0). Leave column blank if you do not have one of these grade levels in your school.

		Grade Levels								
		<u>K</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
White	Male	_____	_____	_____	_____	_____	_____	_____	_____	_____
	Female	_____	_____	_____	_____	_____	_____	_____	_____	_____
African American	Male	_____	_____	_____	_____	_____	_____	_____	_____	_____
	Female	_____	_____	_____	_____	_____	_____	_____	_____	_____
American Indian	Male	_____	_____	_____	_____	_____	_____	_____	_____	_____
	Female	_____	_____	_____	_____	_____	_____	_____	_____	_____
Asian/Pacific Islander	Male	_____	_____	_____	_____	_____	_____	_____	_____	_____
	Female	_____	_____	_____	_____	_____	_____	_____	_____	_____
Hispanic/Latino	Male	_____	_____	_____	_____	_____	_____	_____	_____	_____
	Female	_____	_____	_____	_____	_____	_____	_____	_____	_____

### Structure for Regular Instruction

5. How are students in your **regular** (not AIG) classes grouped?

- ☐ By level of ability/performance in all classes  
☐ By level of ability/performance in Reading/Language Arts only  
☐ By level of ability/performance in Mathematics only  
☐ By level of ability/performance in other subjects [*Specify* \_\_\_\_\_]  
☐ Heterogeneously in all classes (no grouping or tracking)  
☐ A mix of heterogeneous and ability grouping [*Please explain*]:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Screening and Identification/Placement Decisions

6. (a) Does your school **screen for possible identification** for the AIG program?

☐ Yes ☐ No

(b) If yes, what instrument(s) are used for the screening process? \_\_\_\_\_  
\_\_\_\_\_

7. (a) Do you have a program for **high potential students, who were not identified as AIG** from your screening pool, that prepares them for possible future AIG placement or advanced courses?

☐ Yes ☐ No

(b) If yes, briefly describe or attach a program description. \_\_\_\_\_  
\_\_\_\_\_

8. Which of the following criteria are used for identification and placement of students into your school's AIG program? [*Check all that apply.*]

- ☐ (A) Self-selection (may include parent request)  
☐ (B) Teacher recommendation  
☐ (C) Grades [*Specify grades needed* \_\_\_\_\_]  
☐ (D) EOG test scores [*Check if you use percentile* \_\_\_\_\_ *or scale score* \_\_\_\_\_]  
☐ (E) Cognitive/intelligence test [*Specify primary test used* \_\_\_\_\_]  
☐ (F) Domain or skill-specific aptitude tests  
☐ (G) Standardized achievement test  
☐ (H) Outside or independent assessment/evaluation (by parent request)  
☐ (I) Other assessment procedures [*Specify* \_\_\_\_\_]  
☐ (J) Student work portfolio  
☐ (K) Other [*Specify* \_\_\_\_\_]

9. (a) Do the criteria listed above carry **equal weight in placement** decisions?

☐ Yes ☐ No

(b) What is the **minimum number of the criteria** checked above necessary to for identification as AIG? [*e.g., 3 out of the 4; 4 out of the 5*] \_\_\_\_\_

(c) Are any of the above criteria **mandatory for identification as AIG?**

\_\_\_\_\_ Yes \_\_\_\_\_ No

If yes, specify which one(s): \_\_\_\_\_

10. (a) Are students **required to maintain** a certain grade point average, test score, or other standard in order to remain in the AIG program? \_\_\_\_\_ Yes \_\_\_\_\_ No

(b) If yes, what **grade point average** must they maintain \_\_\_\_\_;  
test score \_\_\_\_\_; other standard \_\_\_\_\_?

11. (a) Are there any **special conditions** under which students in your school have been placed into the gifted and talented program other than those identified above?

\_\_\_\_\_ Yes \_\_\_\_\_ No

(b) If yes, please explain those special conditions \_\_\_\_\_  
\_\_\_\_\_

(c) Approximately how often would you say these **special conditions** arise? [*Specify approximate number of students per year*] \_\_\_\_\_

12. Please feel free to share any additional information or comments regarding your school's AIG program. [*Use back of page if necessary.*]

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### THANK YOU FOR YOUR TIME AND COOPERATION!

**Questions?** Contact Dr. Karolyn Tyson, University of NC-Chapel Hill: (919) 962-5601

Please return this survey before Christmas **if at all possible**, but **no later than January 5, 2001**. We are on a very short timeline for reporting to the General Assembly. We will need time to process and analyze the information from all schools and may use this information to help select a few schools for case studies.

Please return survey to: **Dr. Karolyn Tyson** by FAX. If you are including attachments where indicated, you may mail them if they are too long to fax. Please **mark the name of your LEA and school clearly** on any attachments mailed.

**FAX Number: (919) 962-7335**

To mail, use self-addressed envelope: Dr. Karolyn Tyson, 155 Hamilton Hall, CB #3210, Chapel Hill, NC 27599-3210.

# NCDPI HIGH SCHOOL ADVANCED COURSES SURVEY

LEA: _____	School: _____
Person completing survey: _____	Title: _____
Phone Number: _____	School Code _____

## Advanced Curriculum Offerings

1. Please indicate which of the following types of advanced courses or programs your school offers:

Honors:	_____ Yes	_____ No
Advanced Placement(AP):	_____ Yes	_____ No
Dual Enrollment:	_____ Yes	_____ No
(college courses)		
International Baccalaureate	_____ Yes	_____ No

2. **How many different AP courses** does your school currently offer? [*Do not include multiple sections of the same course; if none, enter zero (0)*] \_\_\_\_\_

Please list the **titles of all AP courses** offered this school year (2000-2001) or attach a list from SIMS or some other source.


3. (a) Are there any **limits on the types of courses** that your high school can offer?

Honors courses?	_____ Yes	_____ No
AP courses?	_____ Yes	_____ No
Dual enrollment?	_____ Yes	_____ No

(b) If yes for any of these options, please explain: \_\_\_\_\_


(c) Do you have any plans or strategies for dealing with these limits? Please explain.

\_\_\_\_\_ Yes                      \_\_\_\_\_ No


## Screening, Identification, and Placement Decisions

4. (a) Over the past three years, have there been any **changes in the way in which you identify students** for the following? [*Mark NA if these courses are not offered in your school.*]

Honors courses: \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA

AP courses: \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA

Dual Enrollment: \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA

International Baccalaureate: \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA

- (b) If yes for any of above, please explain: \_\_\_\_\_

\_\_\_\_\_

5. (a) Which of the following criteria are used at your school **for identification and placement** of students into your school's **honors and/or AP courses**? [*Check all that apply.*]

\_\_\_\_\_ (A) Self-selection (may include parent request)

\_\_\_\_\_ (B) Teacher recommendation

\_\_\_\_\_ (C) Grades [Please specify grades needed \_\_\_\_\_]

\_\_\_\_\_ (D) Test scores [Please specify test and scores needed \_\_\_\_\_]

\_\_\_\_\_ (E) Other assessments [Please specify \_\_\_\_\_]

\_\_\_\_\_ (F) Other [Please specify \_\_\_\_\_]

- (b) Do the criteria listed above (including those you may have added) carry equal weight in placement decisions?

\_\_\_\_\_ Yes \_\_\_\_\_ No

- (c) If no (i.e., if they carry unequal weight), which criteria listed above (A-F) carry the most weight? [*Check all that apply.*]

\_\_\_\_\_ (A)

\_\_\_\_\_ (B)

\_\_\_\_\_ (C)

\_\_\_\_\_ (D)

\_\_\_\_\_ (E)

\_\_\_\_\_ (F)

6. (a) Are students at your school able to self-select into advanced courses **without having met** any of the previously identified placement criteria (B-F in item 5)? [*Mark NA if course options are not offered in your school.*]

Honors courses \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA

AP courses \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA

Dual Enrollment \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ NA

- (b) What support systems are in place to promote success of the students in these courses?

\_\_\_\_\_ None

\_\_\_\_\_ Peer Tutoring

\_\_\_\_\_ Mentoring

\_\_\_\_\_ Other [*specify* \_\_\_\_\_]

7. How often do eligible students at your school decline placement in:
- (a) Honors courses? \_\_\_\_\_ Not very often \_\_\_\_\_ Often \_\_\_\_\_ Very Often
- (b) AP courses? \_\_\_\_\_ Not very often \_\_\_\_\_ Often \_\_\_\_\_ Very Often
8. How often do students who have **previously been in Academically Gifted (AIG) programs decline** to take advanced courses in high school?
- \_\_\_\_\_ Not very often \_\_\_\_\_ Often \_\_\_\_\_ Very Often
9. (a) For what **reasons are students most likely to decline placement** in any of these courses?  
*[For each reason listed, indicate the frequency for declining from 5 (very important) to 1 (not at all important).]*

	Very frequent		Somewha t frequent		Never
Doesn't want to work hard	5	4	3	2	1
Employment outside of school	5	4	3	2	1
<b>Extracurricular activities</b>	5	4	3	2	1
Conflicts with other courses	5	4	3	2	1
Other _____	5	4	3	2	1
Other _____	5	4	3	2	1

- (b) Does your school keep records on this?
- \_\_\_\_\_ Yes \_\_\_\_\_ No

10. (a) Is there a typical or **type** of student who is **most likely** to decline placement in advanced course (honors and/or AP) offerings?

\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Not sure

- (b) If yes, please describe that "typical" student in demographic terms, including: gender, ethnicity, grade level, socio-economic status (SES), and whether the student has been identified as academically gifted (AIG).

_____ Gender	_____ AIG or Not AIG
_____ Ethnicity	_____ SES
_____ Grade Level	_____ Other characteristics

11. (a) Are there special, well-defined programs that **prepare and support students** who otherwise might **not** be identified for or placed in AP or honors courses?

\_\_\_\_\_ Yes \_\_\_\_\_ No

- (b) If yes, briefly explain how this program works or attach a program description.  
*[Use the back of the page if necessary.]*

### Regular Instructional Program

12. (a) Do you **group students by ability or performance** for English courses?

\_\_\_\_\_ Yes \_\_\_\_\_ No

(b) Do you **group students by ability or performance** for Mathematics courses?

\_\_\_\_\_ Yes \_\_\_\_\_ No

(c) If yes, please list the names of the "course grouping" or level and the types of students intended to be served.

**Titles for Each Level/Group**

**Types of Students Served**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. What are the feeder school(s) to your high school? [*Please list.*]

\_\_\_\_\_  
\_\_\_\_\_

14. Please feel free to share any additional information or comments regarding your school's AP, honors, dual enrollment, and/or International Baccalaureate courses. [*Use back of page if necessary.*]

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**THANK YOU FOR YOUR TIME AND COOPERATION!**

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**FAX Number: (919) 962-7335**

To mail, use self-addressed envelope: Dr. Karolyn Tyson, 155 Hamilton Hall, CB #3210, Chapel Hill, NC 27599-3210

## Attachment C

### Preliminary Data of Enrollments in AIG Programs and Honors and AP Courses By Ethnicity



## Enrollment in Honors and Advanced Placement (AP) Courses, 1998 - 2000

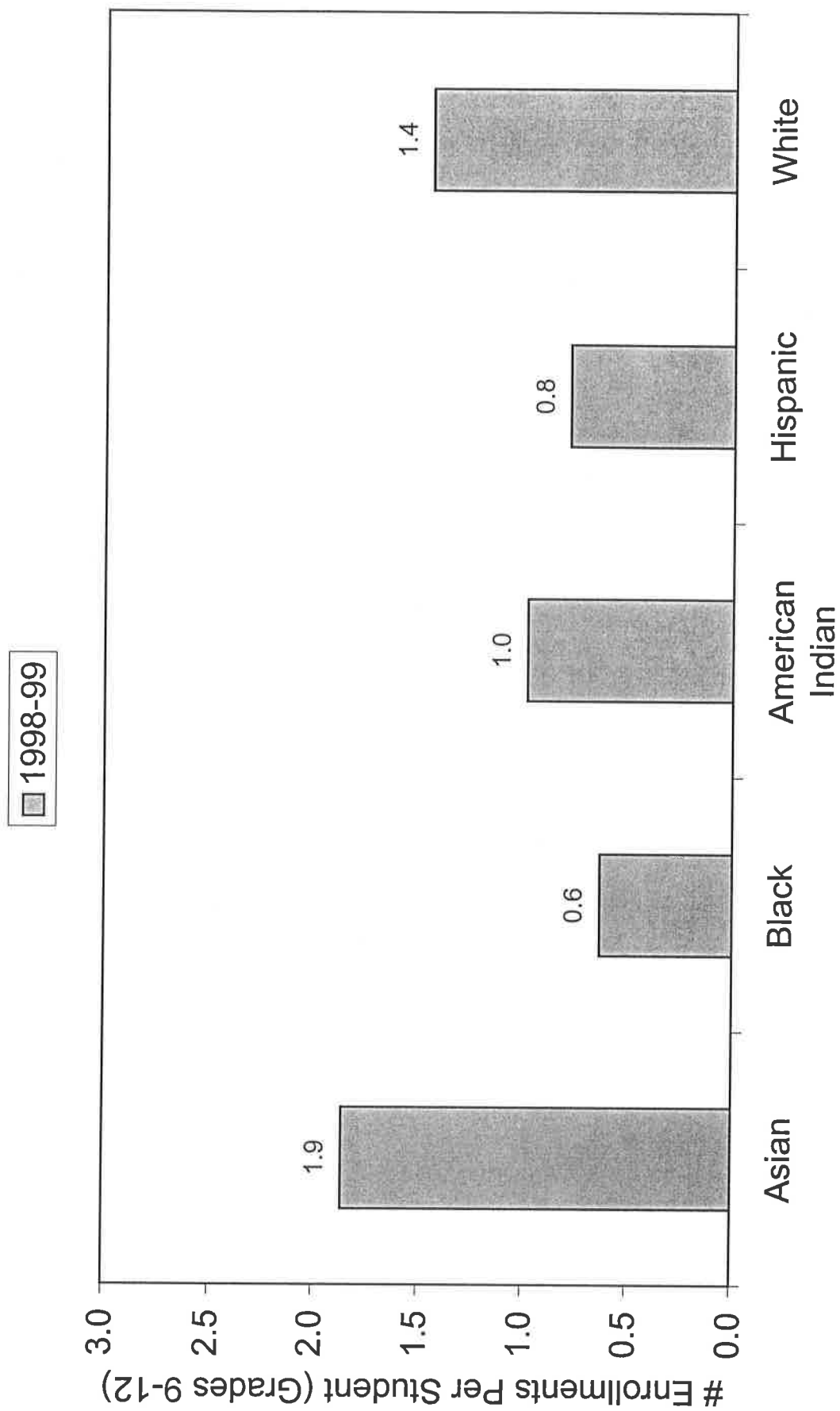
1997-98		Asian	Black	Am Indian	Hispanic	White	All Students
	Number of Honors Enrollments	10,165	53,507	4,560	4,353	286,871	360,620
	Number of AP Enrollments	2,021	4,417	275	454	37,064	44,362

1998-99	Number of Honors Enrollments	11,397	62,016	4,667	5,277	311,990	397,441
	Number of AP Enrollments	2,430	4,898	232	599	40,414	48,804

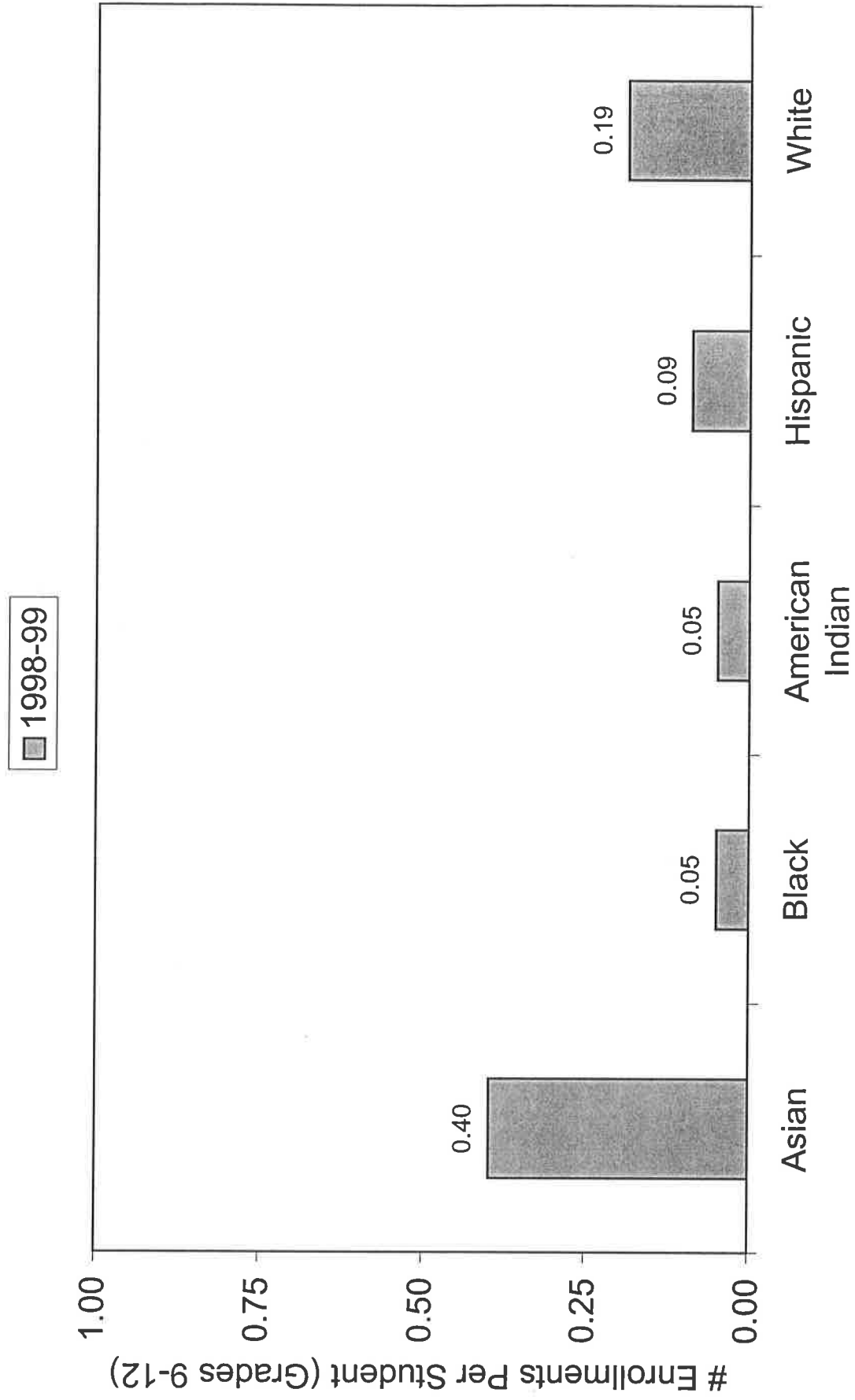
1999-00	Number of Honors Enrollments	11,869	66,504	4,424	6,428	324,254	416,299
	Number of AP Enrollments	2,977	4,814	203	667	43,407	52,363

NOTE: These figures represent the total numbers of students in Honors and AP courses. Therefore, if a student was enrolled in multiple Honors or AP courses, he/she will be counted more than once in these totals.

## Enrollment in Honors Courses by Ethnicity



## Enrollment in Advanced Placement Courses by Ethnicity



# AIG Enrollment by Ethnicity

## 1998-99

