Grading Disparities in Georgia's High School Algebra I, 9th Grade English Literature, 11th Grade English Literature, Biology, Physical Science, History, Geometry, and Economics Classes

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I. Introduction

This study examines the relationship between course grades and End of Course Test (hereafter EOCT) scores for Algebra I, 9th Grade English Literature, 11th Grade English Literature, Biology, Physical Science, History, Geometry, and Economics across school systems in Georgia. Course grades will be correlated with EOCT scores to determine the relationship between the two measures.

In order to examine the relationship between course grades and EOCT scores, the end of course exam score of each individual high school student was assigned a percentile score in comparison to other students in Georgia who took the test. For example a student who scored a 400 on the 2007 Physical Science EOCT scored in the 38th percentile. This means that student scored better than 38 percent of students who took the test in Georgia in 2007. Grades and their relationship to "failing to meet expectations" and to "exceeding expectations" on the EOCT are also examined. A score of less than 400 on the Biology EOCT is considered a "failing" score and a score of 450 or greater on the Biology EOCT is considered a score that "exceeds expectations."

II. Description of Methodology and Findings

A. Grading Disparities Across School Systems

Table 1 contains the average percentile score on the relevant EOCT of students who received an "A", "B", or "C" in a high school class for each school system in Georgia. The first column contains the average percentile rank for "A" students, the second column contains the average percentile rank for "B" students, and the third column contains the average percentile rank for "C" students. If, for example, a high school had 5 students receive an "A" in Economics and their individual EOCT percentile scores were 75th, 84th, 99th, 70th, and 87th then the average percentile score reported in Table 1 would be 83, meaning that the average "A" student in this system's Economics classes scored in the 83rd percentile. The average percentile scores presented in Table 1 can be compared across columns to compare grading rigor across school systems.

Table 2 contains the relevant EOCT failure rates of students who received an "A", "B", or "C" in a high school class for each school system in Georgia. The number reported in the first column of Table 2 is the percentage of high school students who received an "A" in class that

failed to meet expectations on the relevant EOCT. Column 2 reports the percentage of students who received a "B" and failed to meet expectations on the EOCT, and Column 3 reports the percentage of students who received a "C" and failed to meet expectations on the EOCT. The failure rates can be compared across columns to get a sense of the level of grading disparities between school systems.

Table 3 contains the relevant EOCT exceed rates of students who received an "A", "B", or "C" in a high school class for each school system in Georgia. Column 1 of Table 3 contains, for each school system, the percentage of students who received an "A" in a high school class and also exceeded expectations on the relevant EOCT. Column 2 contains the exceed rate for "B" students and Column 3 contains the exceed rate for "C" students. Exceed rates can be compared across columns to illustrate differences in grading standards across school systems.

Table 4 contains school system level EOCT failure rates, the percentage of students in a school system who received an "F" course grade, and the percentage of students in a school system who received a "D" or "F" course grade. Comparisons across columns illustrate the level of grade inflation. Differences in the size of the gap between EOCT and course failure rates across school systems are indicative of grading disparities.

III. Conclusion

The findings presented in this study indicate that there are considerable grading disparities across Georgia's High School Algebra, English Literature, Biology, Physical Science, History, Geometry, and Economics classes. Comparing student's course grades to their End of Course Test (EOCT) scores indicates that some schools and school systems appear to be inflating course grades relative to EOCT scores considerably while others appear to hold their students to higher standards.

These disparities are disconcerting because they may impact college success, Hope scholarship retention rates for Hope scholars, and the need for learning support (remedial classes) in college. Students from school systems that appear to consistently inflate grades may be less likely to succeed in college courses, less likely to retain the Hope scholarship, and more likely to need to take remedial classes after enrolling in college than students from schools and school systems that hold their students to higher standards.

Grade inflation seems to be more prevalent in some course then in others. Courses that allow for a lot of subjectivity in grading (Economics, History, and English Literature) appear to have more grade inflation occurring while courses with more objective grading (Algebra, Biology, Geometry, and Physical Science) appear to have less grade inflation.

Future research should be undertaken to analyze the impact of grading disparities on later academic success. An examination of the impact that rigor in grading standards (or a lack of rigor) may have on a student's academic future should be performed once data on Hope eligibility, Hope retention rates, and performance in college courses become available for the students whose data were used in this study,.

IV. Appendix

This study only examines high schools. Data on middle school students are not reported because it is not a straight forward comparison between high school and middle school students. Individuals who take these courses in middle school are generally stronger students than those who take it in high school. Data from students who were "displaced" or had a "medical emergency" were also omitted from the data. Tables 1, 2, 3, and 4 only include data from school systems with at least 100 high school students who took the relevant class for school year 2007.

Data from the following "nontraditional" schools are not presented in the results: Classic City Performance Learning Center, Early College High School at Carver, Mountain Education Center, Polaris Evening School, Open Campus High School, Georgia School for the Deaf, Atlanta Area School for the Deaf, Eastman Youth Development Campus, Hall County/Gainesville Evening High School, Georgia Academy for the Blind, Renaissance Academy, DeKalb Alternative School, The Champion Middle Theme School, Houston County Career and Technology Center, Elberta Open Campus High School, Maggie Califf Learning Complex, Early College Academy of Columbus, Gwinnett InterVention Education (GIVE) Center, Jordan Vocational High School, William S. Hutchings Career Center, Phoenix High School, Career Academy, DeKalb/Rockdale PsychoEducation Center, DeKalb Alternative Night School, Destiny Academy of Excellence Charter School, DeKalb Truancy School, APS-CEP Partnership School, McClarin Alternative School, Lighthouse Care Center of Augusta, Macon Behavioral Health System, The Bridge, KidsPeace, Amdg Inc, Augusta Youth Develop Center, Baker Academy, Briarcliff High School, Carver High School, Central

Alternative School, Chattanooga Valley High School, Clayton County Alternative Center, CrossRoads Alternative Middle/High School, D. F. Douglass Alternative Center, Dekalb High School Of Technology North, Dekalb Life Skills Academy, Dekalb Transition Academy, Eagle Woods Academy, Fernbank Science Center, Harper-Archer High School, Horizons School, Howard School, Koinonia Accredited Center Ind, Lakeside Preparatory School, Maxwell High School Of Technology, Newnan Classical School.