



Student Progress and Achievement in Indiana Charter Schools: The Impact of Continued Enrollment

Report 2007-1
January 2007



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**OFFICE OF CHARTER SCHOOL RESEARCH
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www.bsu.edu/teachers/ocsr



Executive Summary

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The Office of Charter School Research (OCSR) located in Teachers College at Ball State University was created to study Indiana's Charter Schools. This study reports the effects on achievement of attending Indiana's Charter Schools over increasing lengths of time. More specifically, the study addresses three questions:

- Is there a noticeable effect on achievement for students enrolled in an established charter school for three years, versus those who have been enrolled for fewer than three years?
- Is that effect also noticeable for continuing minority students in these charter schools versus new minority students?
- Is there evidence that the gap between minority and Caucasian student achievement narrows with longer enrollment in a charter school?

The data revealed that students who have attended charter schools for three years are more likely to meet normal growth benchmarks than those who are newer to charter schools. In essence, students who attend charter schools for longer periods of time are more likely to perform at levels closer to their national peers.

In addition, it was found that minority students who have attended charter schools for three years achieve at a higher level than those who are new to the school. More specifically, it appears that the achievement gap between minority students and Caucasian students has been virtually eliminated in the area of Mathematics. In Language Arts, achievement seems to increase with longevity in a charter school for both minority and Caucasian students.

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Introduction

As the charter school movement grows and the number of students enrolled in charter schools increases, there is interest in understanding what challenges face education as a whole and how those challenges are being met differently in charters. Of primary interest is whether or not students currently attending charter schools are performing better than similar students attending a traditional public school.

This study addresses questions of the effectiveness of charter schools for those students enrolled in charters for increasing periods of time. As the length of time enrolled in a charter increases, so does exposure to the charter school environment. This study examines to what extent an increase in the time a student is enrolled increases achievement.

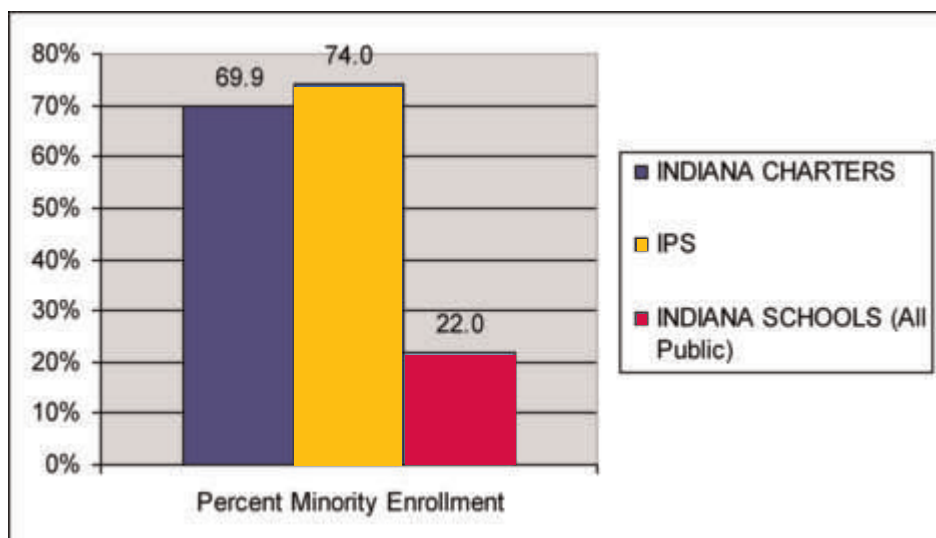
The overall percentage of minority students in Indiana charter schools far exceeds that of all public schools in Indiana, taken collectively.

Charter School Demographics

Figure 1 represents the percentage of minority¹ students based on total enrollment during 2005-2006 for all 29 Indiana charters, Indianapolis Public Schools, and all Indiana public schools.

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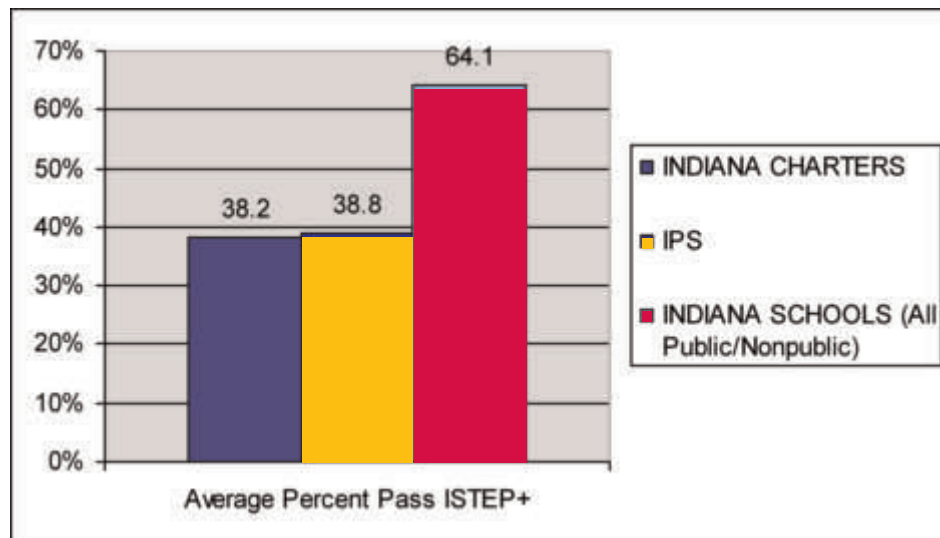
Figure 1
Selected Demographics of Indiana Schools for 2005-2006



¹Minority statistics consist of students whose ethnicity/race category is African American/Black, Native American/Alaskan, Asian/Pacific, Latin American/Hispanic, Multiracial, and Other.

Based on figures from the Indiana Department of Education Web site at www.doe.state.in.us, the overall average percent passing ISTEP+ for charter schools is comparable to that of Indianapolis Public Schools. As shown in Figure 2, the overall pass rate for ISTEP+ for all Indiana schools, both public and nonpublic, far exceeds that of the charter schools and IPS, where the number of minority students is significantly higher.

Figure 2
Selected ISTEP+ Performance for Indiana Schools for 2005-2006



ISTEP+ scores indicate that students enter charter schools lagging behind their peers, but these scores tell us nothing about growth.

Charter School Achievement

Research has revealed an achievement gap between minority and Caucasian students, which is indicated by ISTEP+ test scores and graduation rates. There is, then, an important challenge for all schools to narrow that gap. With the high percentage of minority students enrolled in Indiana's charter schools, the public will judge the success of charter schools by their ability to increase achievement and foster growth among these students.

In this report we address three important questions with regard to charter school student achievement:

- Is there a noticeable effect on achievement for students enrolled in an established² charter school for three years, versus those who have been enrolled for fewer than three years?
- Is that effect also noticeable for continuing³ minority students in these charters versus new minority students?
- Is there evidence that the gap between minority and Caucasian student achievement narrows with longer enrollment in a charter school?

ISTEP+ scores indicate that students enter charter schools lagging behind their peers, but these scores tell us nothing about growth. In order to answer the important questions, an examination of student growth measured against peer norms is necessary. All Indiana charter schools use the Measures of Academic Progress (MAP) test of the Northwest Evaluation Association (NWEA) as a measure of student growth.

²Established charter school is defined, for the purpose of this study, as one that has been in operation for three or more years.

³Continuing students are defined, for the purpose of this study, as those who have attended a charter school exactly three years, as compared to new students who have been in a charter for fewer than three years.

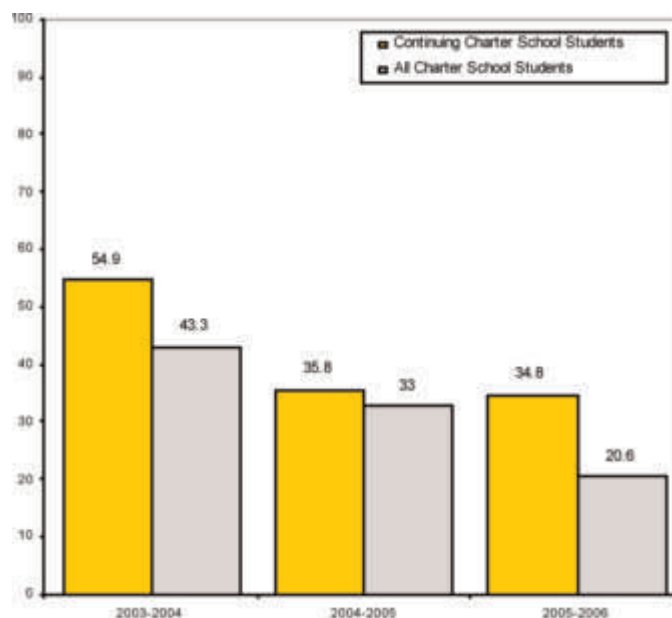
Performance among Indiana charter school students on the MAP test is measured against NWEA norms from a 2005 study of more than two million students from participating districts in the United States.⁴ The growth norms from this study are derived using the growth of student groups with identical initial scores for a more reliable comparison. In order to identify students meeting and not meeting such norm group growth benchmarks, scores for each charter school student in the sample were compared with the mean of the norm group, and those at or above were identified as having met mean norm group growth.

It is important to keep in mind that the goal of this study was to gain an understanding of the impact of continued enrollment in an Indiana charter school on student achievement. To this end, the following discussion focuses on the relative performance (as measured by percent of students meeting the norm group benchmark described above) of those who have been in a charter school for the full three years they were in operation versus those who were in the same schools for a shorter period. This study does not allow for comparisons between charter school students and those not enrolled in charter schools, because such data were not available. In addition, this study does not examine directly the issue of relative performance over time. Although both of these issues are indeed important in the broader discussion of charter school effectiveness, they were beyond the purview of the current research.

The appearance of the percentage of students meeting norm growth appears to decline due to variation in the sample sizes of the data (see Figures 3–5). The percentage was based on a significant increase in charter school enrollment from 2003 to 2006 (2003-04: $n = 2854$; 2004-05: $n = 4382$; 2005-06: $n = 6705$, where n is total Indiana charter enrollment), whereas the number of students enrolled in the charter school for exactly three years held constant for the years included. Thus, these results are not an indication that achievement among students remaining in the charter schools declined over the period observed. Rather, it reflects the performance of relatively large numbers of new students who have not been enrolled in the charter schools for an extended period of time (more than one school year). For those students who have been enrolled in the charters for the full three years of operation, the percent meeting norm growth generally appears to have been highest during the first year, and then remained constant over time.

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Figure 3
Percent of Charter School
Students Meeting and Exceeding
Norm Group Growth in MAP:
Mathematics



⁴The Northwest Evaluation Association (NWEA) publishes RIT Scale Norms describing the performance and growth of students from school systems that volunteered to participate in the most recent study, conducted in 2005. Full description of norms is available at www.nwea.org.

Students who are exposed to this long-term effect of the charter school environment meet or exceed typical norm group growth more frequently than their peers.

Figure 4
Percent of Charter School Students Meeting and Exceeding Norm Group Growth in MAP: Reading

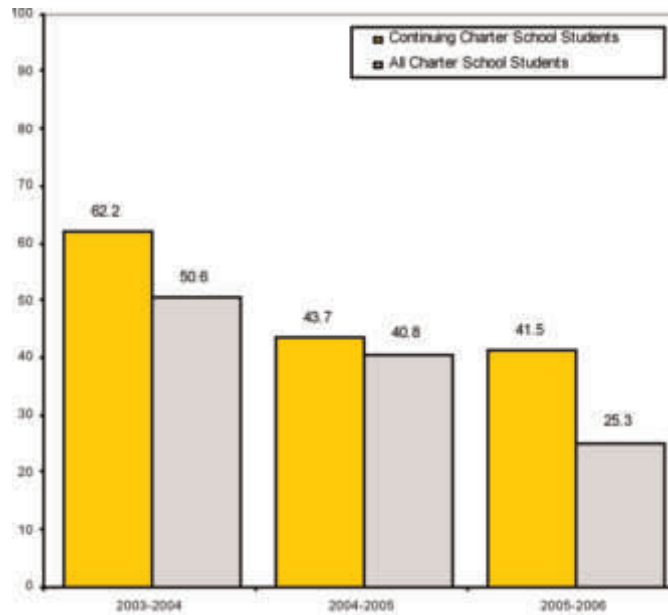
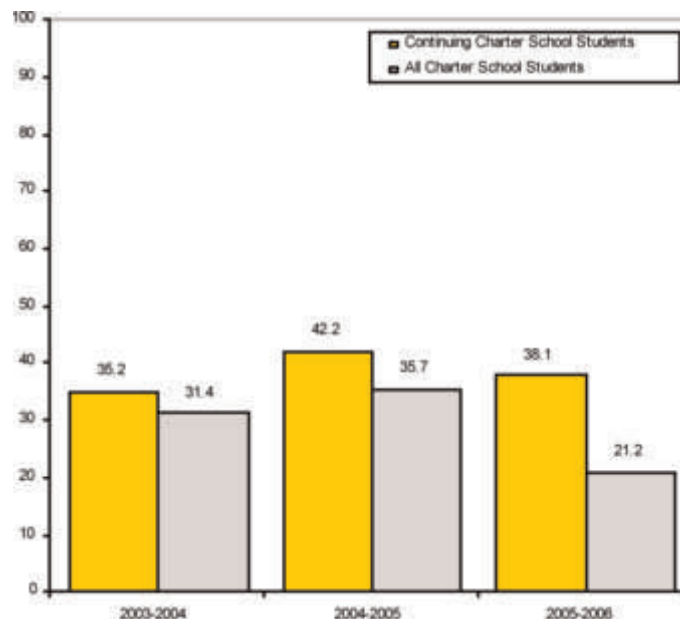


Figure 5
Percent of Charter School Students Meeting and Exceeding Norm Group Growth in MAP: Language



The focus of this report is on the performance of those students who were enrolled in charter schools for exactly three years, while the performance of all students in Indiana charter schools serves as a comparison group.

Students who have attended one of these charter schools for three years, outperform those students who have attended a charter school for less than the full three years. These individuals may be thought of as those who have received the greatest benefit of exposure to charter schools. Students who are exposed to this long-term effect of the charter school environment meet or exceed typical norm group growth more frequently than their peers who were in the system for less than three years.

Minority students enrolled in charters for the full three-year period also benefit from the charter school environment. Figures 6, 7, and 8 show that continuing minority students demonstrate growth that is comparable to or greater than that of new minority students in the charter school.

The difference in the percent of minority students meeting or exceeding norm group growth versus that of new minority students is most noticeable in Mathematics, particularly during the 2005-2006 school year.

Figure 6
Percent of Minority Charter School Students Meeting and Exceeding Norm Group Growth in Map: Mathematics

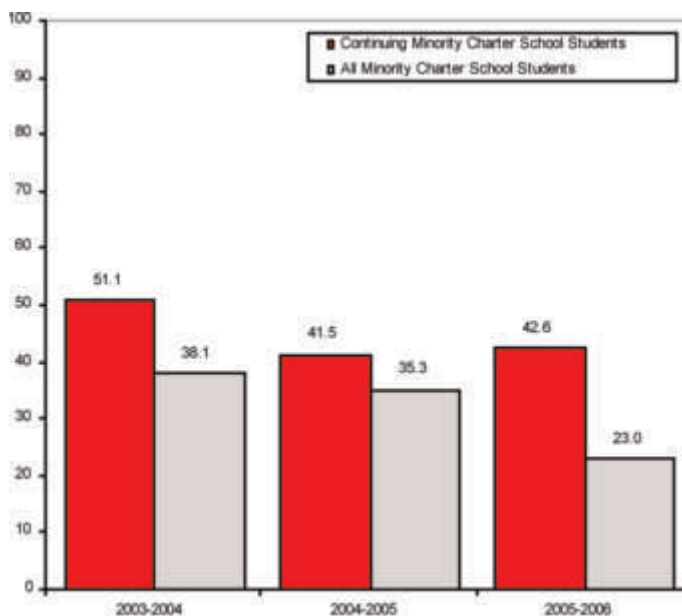


Figure 7
Percent of Minority Charter School Students Meeting and Exceeding Norm Group Growth in Map: Reading

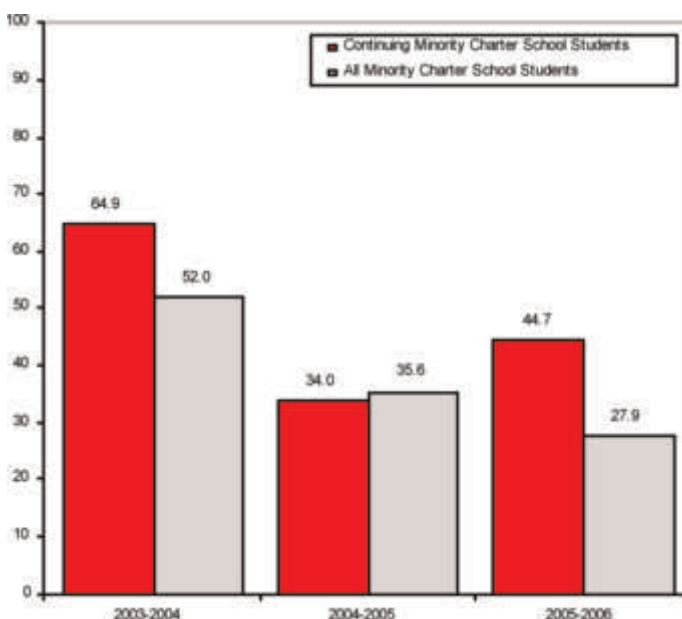
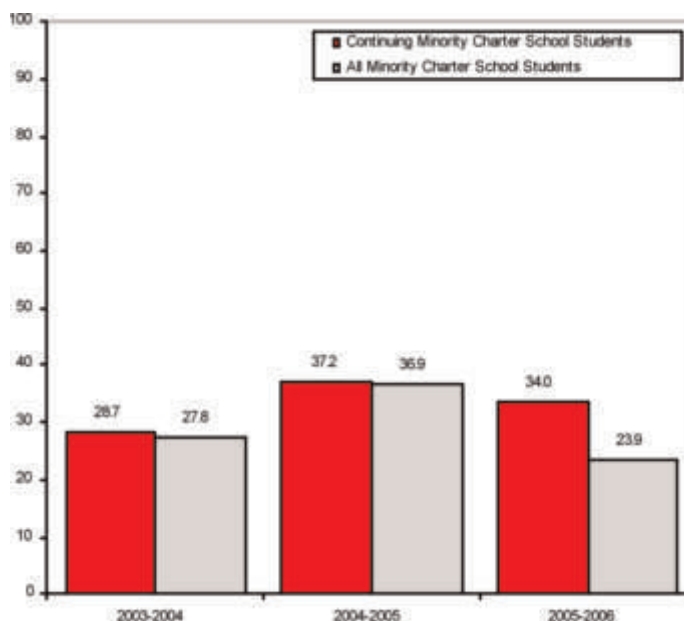


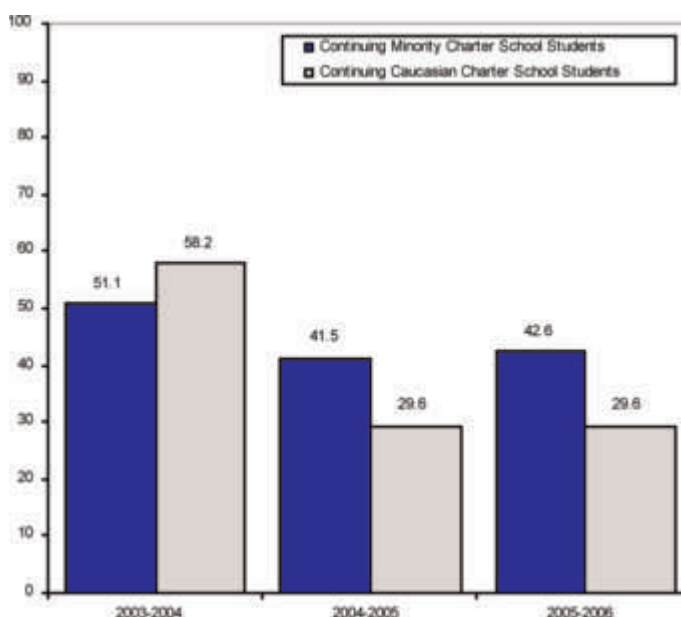
Figure 8
Percent of Minority Charter School Students Meeting and Exceeding Norm Group Growth in Map: Language



A major focus of charter school research has been the disparities that exist in achievement between different student populations, and the success of strategies used by the schools to address those disparities. To determine whether the achievement gap between minority and Caucasian students is narrowing in charter schools, results for continuing minority and continuing Caucasian charter school students were compared.

Figures 9, 10, and 11 compare the two groups based on the percentage of students who met or exceeded the norm median growth in each year. Most important is the question of whether minority students are achieving greater growth than their Caucasian peers,

Figure 9
Percent of Continuing Minority and Caucasian Charter School Students Meeting and Exceeding Norm Group Growth in Map: Mathematics



With longer periods of enrollment in a charter school, minority students outpace their Caucasian peers in Mathematics.

Figure 10
Percent of Continuing Minority and Caucasian Charter School Students Meeting and Exceeding Norm Group Growth in Map: Reading

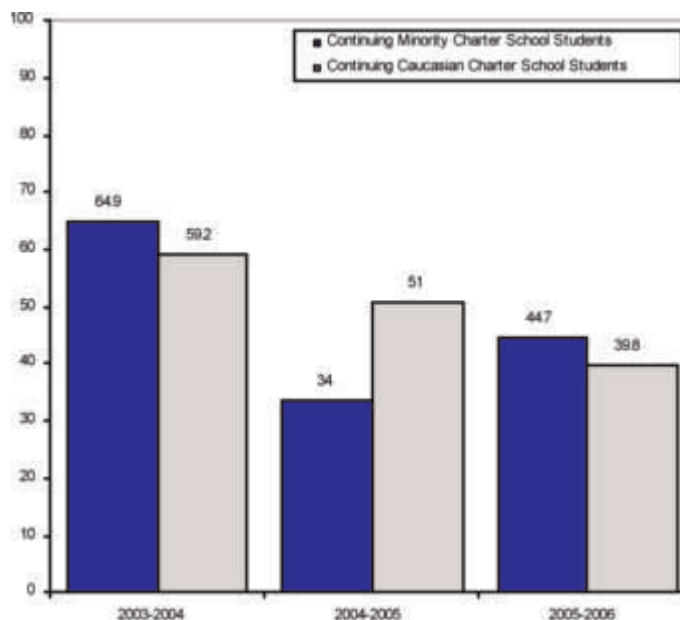
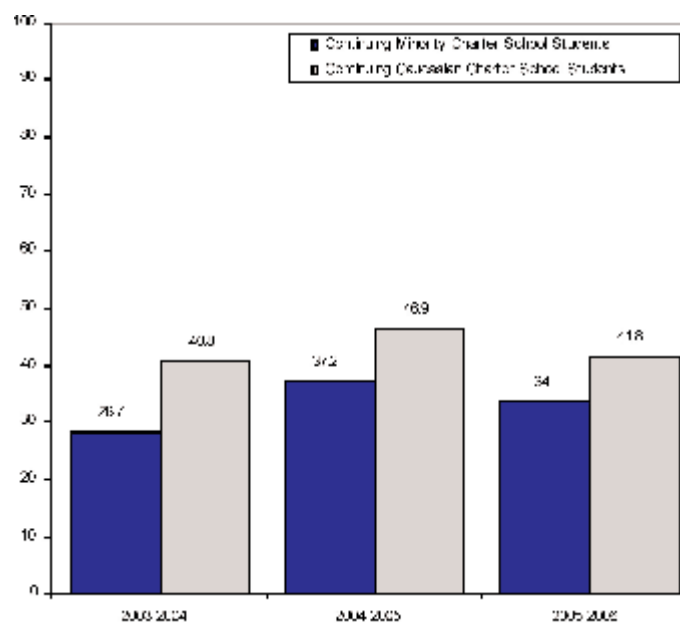


Figure 11
Percent of Continuing Minority and Caucasian Charter School Students Meeting and Exceeding Norm Group Growth in Map: Language



indicating that they are “catching up” with continued exposure to the charter school environment.

With longer periods of enrollment in a charter school, minority students outpace their Caucasian peers in Mathematics. By 2005-2006, the percentage of continuing minority students meeting norm growth exceeds that of continuing Caucasian students by more than 10%. This is compelling evidence that, in the subject of Mathematics, continued enrollment in the charter school is narrowing the achievement gap between minority and Caucasian students.

In Reading, minority student performance is close to or exceeds that of Caucasian students. In Language, fewer minority students than Caucasian students are meeting norm growth despite the fact that they have been enrolled in a charter school for three years. This indicates that, in this subject, minority students are not yet closing the achievement gap.

Conclusion

In short, students enrolled in a charter school for longer periods of time perform at levels closer to their national peers.

Based on results presented in this report, it is reasonable to conclude that more than a third of all students currently enrolled in charter schools are meeting typical growth based on national norms. In addition, it appears that the likelihood of a student meeting this norm growth benchmark is higher if they have been in a charter school for a full three years, as opposed to a shorter time span. In short, students enrolled in a charter school for longer periods of time perform at levels closer to their national peers. More data that might further illuminate this finding will become available as students spend longer periods of time in charter schools.

In addition to this overall result regarding the relationship between enrollment duration and student achievement, it also seems that minority students who are in charter schools for longer periods of time perform better than those minority students who are new to a charter school. Further, the results for student progress in Mathematics indicate that the gap between minority and Caucasian students has essentially disappeared. In Reading and Language, progress is being made toward that end, with both Caucasian and minority students demonstrating similar performance in general, and higher levels of achievement given a longer tenure in a charter school.



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