



**EXECUTIVE SUMMARY**  
**Achievement Outcomes for Mayor-Sponsored Charter School Students Compared to Peers in Indianapolis-Area Traditional Public Schools**

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Charter schools and research to determine charter school effectiveness continue as topics of interest in the school reform movement. Methodological issues concerning parent motivation, school qualities, and the attenuating impact of student transfer upon outcomes contributes to inconsistent and sometimes conflicting results characterizing the research findings. The current research compared achievement outcomes for students enrolled in Indianapolis mayor-sponsored charter schools with outcomes for students enrolled in Indianapolis metro area traditional public schools. The primary analyses employed propensity score matching to create a quasi-experimental design comparing academic outcomes measured by Indiana Statewide Testing for Educational Progress (ISTEP) for a treatment group of charter school students with outcomes of a control group of traditional public school students continuously enrolled from kindergarten through 5<sup>th</sup> grade in the same school. The continuous enrollment requirement for the primary analyses eliminated the confounding effect of student transfer, a limitation in much of the existing charter school research. Supplemental analyses comparing achievement outcomes for students enrolled from third grade without the continuous enrollment since kindergarten requirement tested the robustness of the findings in the primary analyses.

This study assessed mayor-sponsored charter school effectiveness by comparing achievement outcomes for matched and unmatched samples of:

- 1) Primary Analyses: students continuously enrolled since kindergarten in either a Mayor-sponsored charter school (treatment group) or one of the eleven IATPS, including Indianapolis Public Schools (IPS) but excluding the Innovation Network Schools that are part of IPS (control group); and
- 2) Supplemental Analyses: students matched at third grade and then continuously enrolled in either a Mayor-sponsored charter or traditional public school throughout the study.

**Method:**

- Propensity matching in a quasi-experimental design with treatment and control groups for students continuously enrolled in the same school.
- Propensity score matching variables include student sex, ethnicity, ELL status, special education status, baseline ELA and mathematics ISTEP scores, disciplinary actions, free or reduced lunch (FRL) status and school level proportions of Black, Hispanic, special education and students on FRL.

- Students eligible for the primary analyses were those with valid 3<sup>rd</sup> grade ISTEP results who continuously enrolled in their school since kindergarten and throughout the time span of the study.
- Students eligible for supplemental analyses were those with valid 3<sup>rd</sup> grade ISTEP results who were enrolled in either a mayor-sponsored or IATPS school at third grade and remained in that type of school throughout the period of the study.
- 4<sup>th</sup> and 5<sup>th</sup> grade ISTEP ELA and mathematics achievement outcomes for students attending a mayor-sponsored charter school were compared with achievement outcomes for students attending an IATPS.
- The 2015, 2016 and combined 2015/16 cohort analyses are for 4<sup>th</sup> and 5<sup>th</sup> grade results; the 2017 and the combined 2015/16/17 cohort analyses are for 4<sup>th</sup> grade results.
- Supplemental analyses include a set of analyses where students are matched on z-scores.
- A mirrored set of all analyses were conducted without propensity score matching.

### **Results:**

The primary analyses show that students continuously enrolled in a Mayor-sponsored charter school outperformed their IATPS peers on the ELA and mathematics ISTEP

- Twenty-nine of 32 possible comparisons show achievement outcomes favoring Mayor-sponsored charter school students on their ELA and mathematics ISTEP as compared to their IATPS peers.
- Seventeen of these favorable comparisons are significant at the .05, .01, and .001 levels.
- In three instances, the gains favor IATPS students— all in math with one instance being significant.

The supplementary analyses show that students who attended a Mayor-sponsored charter school from at least third through fifth grade had greater gains than their traditional public school peers.

- Twenty-two of 32 possible comparisons show achievement outcomes favoring Mayor-sponsored charter school students on their state assessments in ELA and mathematics.
- Sixteen of these favorable comparisons are significant.
- Among the analyses where achievement outcomes favor traditional public school students, only two instances are significant.

The final set of analyses matched students on z-scores. Again, this supplemental analysis shows that students who attended a Mayor-sponsored charter school from at least third through fifth grade had higher achievement gains than their peers in traditional public schools, though these gains are less significant than those in the previous analyses.

### **Conclusions and Recommendations**

Overall, results of the primary analyses (for students continuously enrolled in the same school since kindergarten) more often show greater achievement outcomes in both English Language Arts (ELA) and mathematics for mayor-sponsored charter school students than for their peers in an Indianapolis-area traditional public school (IATPS). The results along with emerging results documenting charter school effectiveness support a movement in the charter school debate away from whether charter schools can be and are effective to an inquiry into how to replicate and scale up effectiveness.