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Research Findings on the Impact of Kid's College on Student Achievement in Chicago

Compiled by

Margaret Jorgensen, Ph.D., MBA
CEO, Measure2Learn

*Conducting research in the areas
of Measurement, Evaluation,
and Statistical Analysis*

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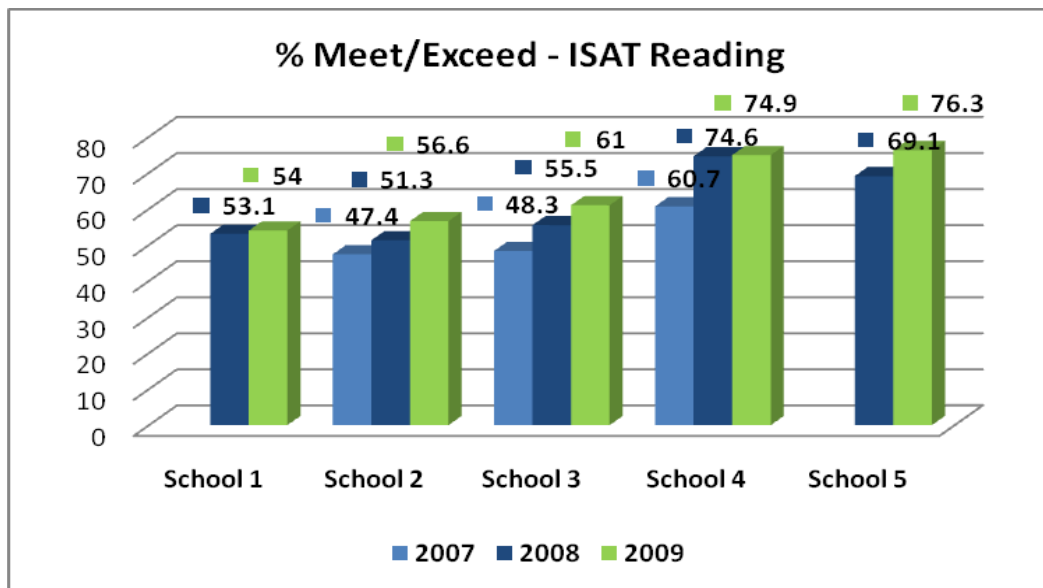
Overview

The purpose of this report is to summarize the impact on Reading and Mathematics achievement growth as a function of Kid’s College, an online student intervention and instructional program, for schools in the Chicago Public School District (CPS). This research spans from fall 2007 through spring 2010 and demonstrates the efficacy of Kid’s College in helping CPS schools improve Reading and Mathematics scores on the Illinois Standards Achievement Test (ISAT).

Kid’s College Impact on ISAT Scores

Five Chicago Public schools have shown noteworthy gains in the percentage of students Meeting or Exceeding the ISAT proficiency standards in Reading and Mathematics since implementation of the Kid’s College program. Three of these schools implemented Kid’s College in 2007, and two schools implemented Kid’s College in 2008. In their first year of implementing Kid’s College, all five schools improved their percentage of students Meeting or Exceeding the proficiency standards on both the Reading and Mathematics portions of the ISAT. Furthermore, the three schools for which ISAT scores are available in their second year of utilizing Kid’s College again improved their ISAT scores in both subjects. All five schools continue to utilize Kid’s College in 2010 and anticipate further improvement of Reading and Mathematics proficiency on the spring 2010 ISAT.

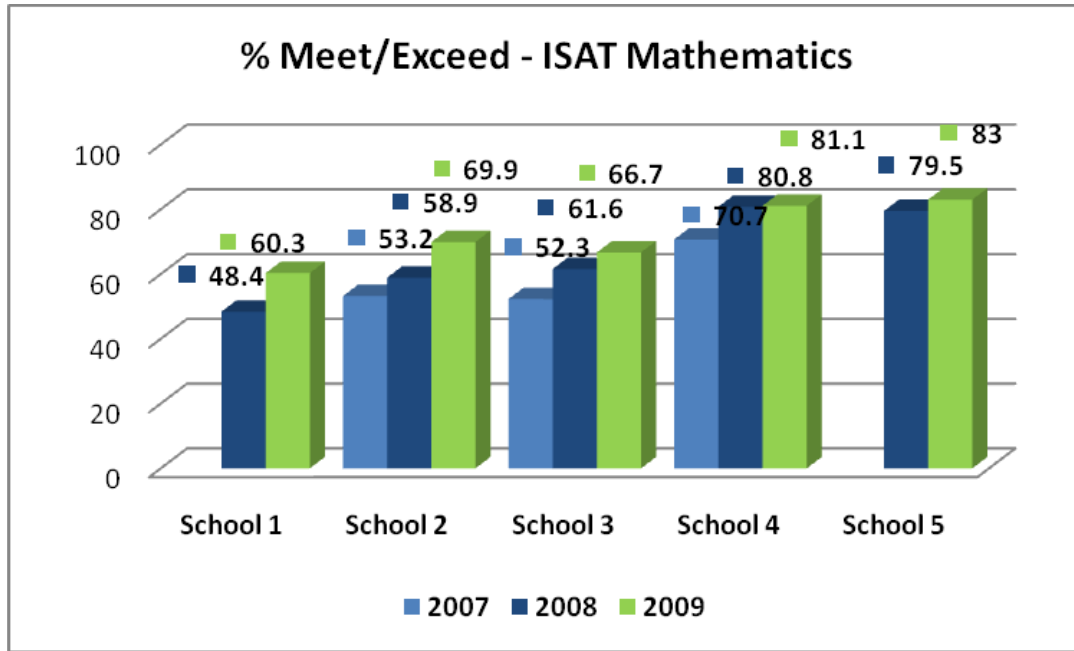
Figure 1: Kid’s College Impact on Students Meeting or Exceeding Proficiency Standards on ISAT Reading in five Chicago Public Schools



School 1 improved their ISAT Reading scores by 0.9 percentage points since implementing Kid’s College; School 2 improved their ISAT Reading scores by 9.2 points, School 3 improved their ISAT Reading scores

by 12.7 points, School 4 improved their Reading scores by 14.2 points and School 5 improved their Reading scores by 7.2 points.

Figure 2: Kid’s College Impact on Students Meeting or Exceeding Proficiency Standards on ISAT Mathematics in five Chicago Public Schools



School 1 improved their ISAT Mathematics scores by 11.9 percentage points since implementing Kid’s College; School 2 improved their ISAT Mathematics scores by 16.7 points, School 3 improved their ISAT Mathematics scores by 14.4 points, School 4 improved their ISAT Mathematics scores by 10.4 points, and School 5 improved their ISAT scores by 3.5 points.

For these five schools, the gains in their percentage of students Meeting or Exceeding the proficiency standards on the ISAT exceeded the overall district gains 75 percent of the time (12 out of 16 categories-subject by year) in 2008 and 2009. Gains for these five schools exceeded the district gains 62.5 percent of the time in Reading (5 out of 8 categories) and 87.5 percent of the time in Mathematics (7 out of 8 categories). In Reading, gains for the Kid’s College schools range from 1.4 to 8.1 percentage points above the district gains. In Mathematics, gains for the Kid’s College schools range from 0.4 to 8.8 percentage points above the district gains.

Figure 3: ISAT Reading – Kid’s College School Gains Exceed District Gains

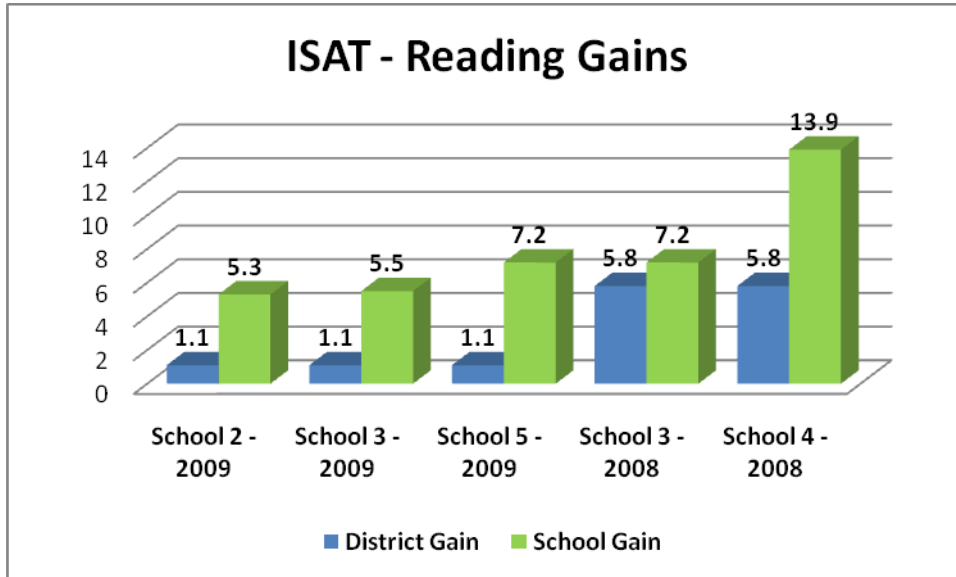
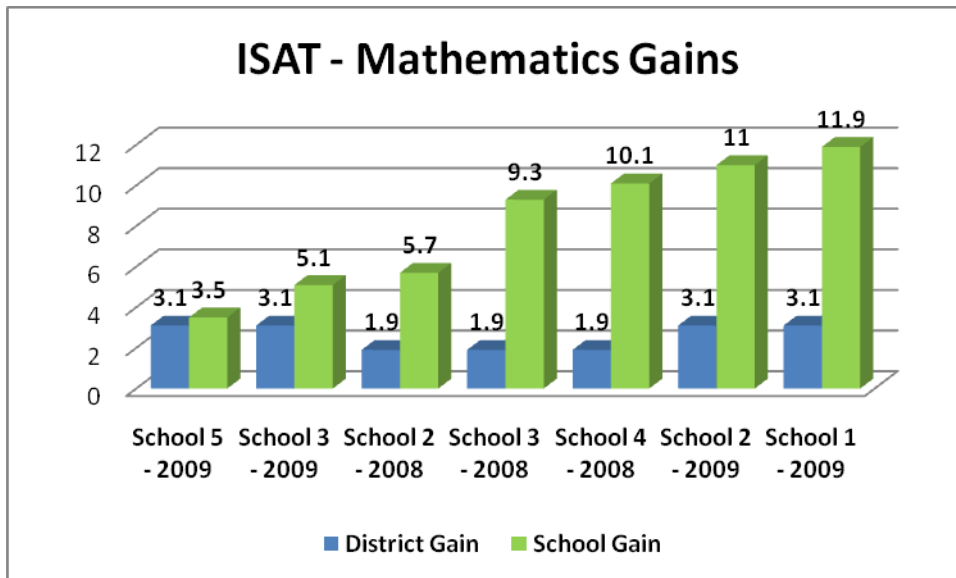
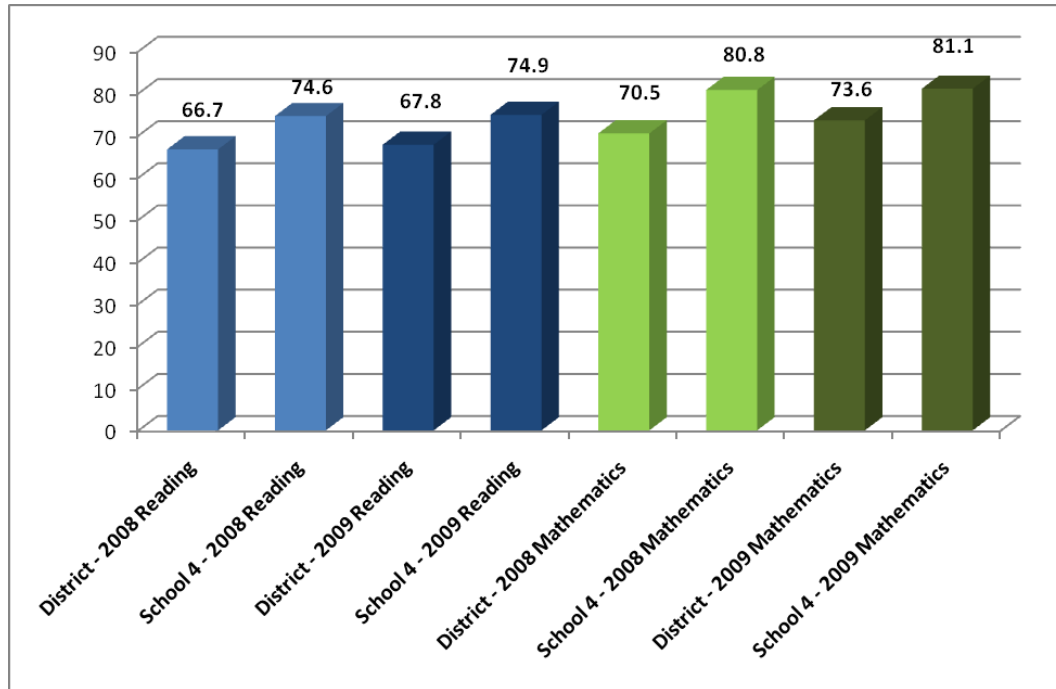


Figure 4: ISAT Mathematics – Kid’s College School Gains Exceed District Gains



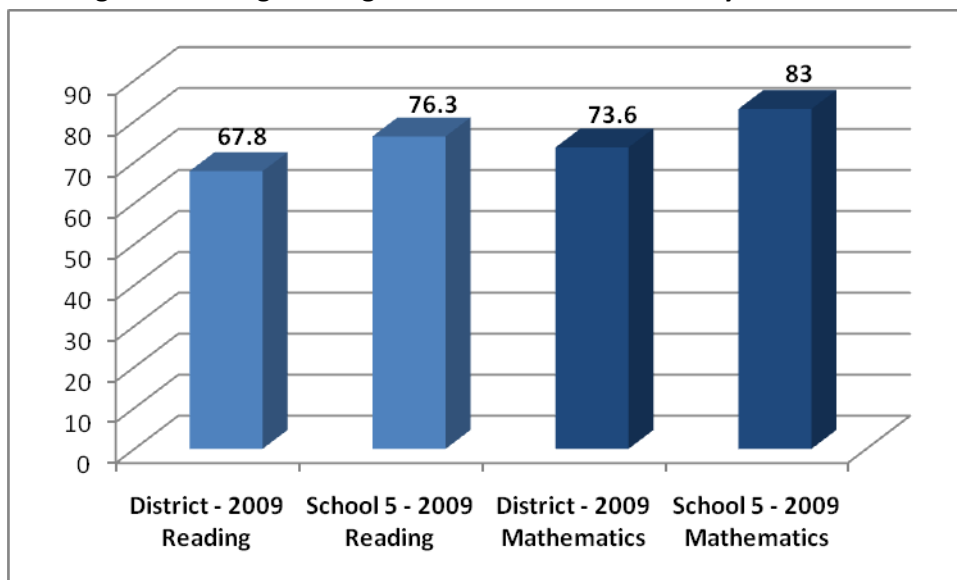
In two of the higher-performing schools, the percentage of students Meeting or Exceeding proficiency standards exceeded the overall district percentage of students Meeting or Exceeding proficiency standards in both Reading and Mathematics. As reported in Figure 5, School 4 outperformed the Chicago Public School district as a whole in Reading and Mathematics ISAT scores for both 2008 and 2009, the first and second years that School 4 utilized Kid’s College.

Figure 5: Comparison of Kid’s College “School 4” to the District as a Whole in Percentage of Students Meeting or Exceeding Reading and Mathematics Proficiency Standards on the ISAT – 2008 and 2009



As reported in Figure 6, School 5 also outperformed the Chicago Public School district as a whole in Reading and Mathematics ISAT scores for 2009. These were the first set of ISAT scores available for this study since School 5 implemented Kid’s College in 2008.

Figure 6: Comparison of Kid’s College “School 5” to the District as a Whole in Percentage of Students Meeting or Exceeding Reading and Mathematics Proficiency Standards on the ISAT – 2009



The Story Behind Improving ISAT Scores

Kid's College, a web-based assessment and intervention program in Mathematics and Reading, delivers a unique, differentiated instructional program for students in K-12. There are five components to Kid's College:

1. GAP Assessment is the standards-based assessment used to identify strengths and weaknesses and to design a program of intervention. Items in the GAP tests were developed specifically to align to the Illinois state content standards.
2. STRIDE Adaptive Technology is the instructional intervention program which adapts mathematics and reading curriculum to every student, moving them up or down the learning hierarchy as a function of their performance on fine-grained tasks aligned to specific knowledge and skill requirements. Their responses are used to scaffold them up or down the curriculum ensuring that each student receives instruction directly at their level of understanding.
3. Custom curriculum written specifically for the state. Content specialists created custom Mathematics, Reading and Language Arts items based directly on the Illinois core curriculum standards to assist with test preparation for the ISAT (Illinois Standards Achievement Test).
4. Customized Instructional Worksheets are generated for students based on their performance on grade-level items as diagnosed by the Gap Assessment. The student is provided with a worksheet per skill strand not yet mastered. The worksheets are accessible online, can be printed one-by-one or in workbook format for classroom use, or emailed to parents for supplemental, targeted skills practice at home.
5. Periodic sports entertainment, reward and recognition for time spent learning in Kid's College. Students are recognized both for their growth and for their prowess at the sport game of their choice.

Kid's College engages students in learning. As reported in Figure 7, implementation of Kid's College in Chicago Public Schools has grown from 92 schools in 2007-08 to 113 schools utilizing the program in 2009-10. Use of Kid's College by these schools is consistent at approximately 70 percent of work during normal school hours and 30 percent of work after school hours.

Figure 7: Growth of Implementation of Kid’s College in Chicago Public Schools Over 3 Years

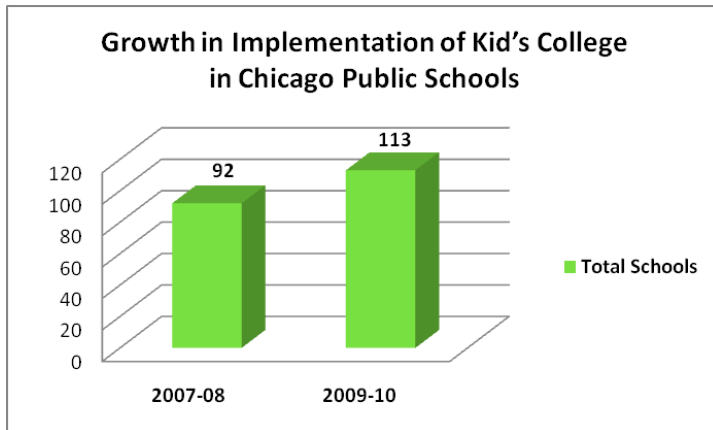
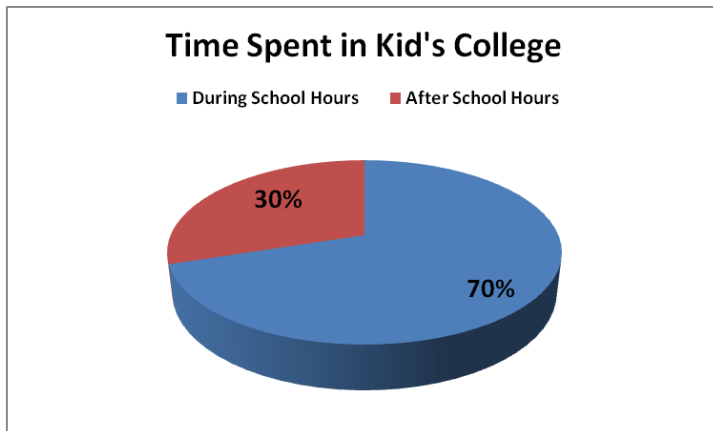
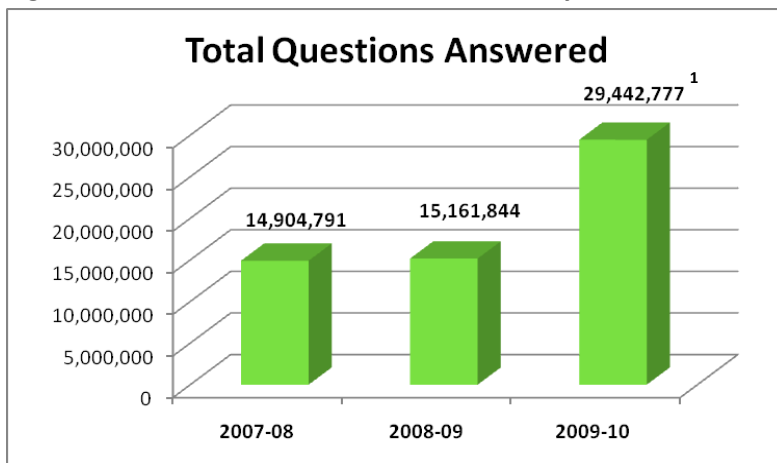


Figure 8: Chicago Public Schools - Time Spent During and After School Hours in Kid’s College



In 2007-08, Chicago students engaged in Kid’s College collectively answered 14,904,791 questions aligned to the Illinois state content standards. In 2008-09 these students answered 15,161,844 total questions, and as of spring 2010, students are on track to surpass 29 million total questions (Figure 9).

Figure 9: Growth of Skills Questions Utilized by CPS Students Using Kid’s College



¹ Projected out annually based on year-to-date use

Over a three-year span, the time engagement in Kid’s College is also on an upward trend. The average time engagement in Kid’s College per student has increased from 259.81 minutes in 2008-09 to 324.08 minutes in 2009-10. This is an important finding because the research on student achievement indicates that time on task is a strong predictor of achievement (Brophy, 1988; Levin and Nolan, 1996).

Conclusions

The evidence is clear and compelling that Kid’s College has a positive impact on student learning and on student achievement as measured on the state accountability assessment program (ISAT). As students work for increasing amounts of time in Kid’s College, their achievement levels increase as well.

References

Brophy, J. E. (1988). Educating teachers about managing classrooms and students. *Teaching and Teacher Education*, 4, 1, 3.

Levin, J. and Nolan, J. F. (1996). *Principles of Classroom Management, 2nd edition*. Boston: Allyn and Bacon.

About Margaret Jorgensen, Ph.D., MBA CEO, Measure2Learn

MBA, Business Leaderships, University of Texas at San Antonio

Ph.D. Measurement, Evaluation, and Statistical Analysis, University of Chicago

M.S. School Psychology, Miami University

B.A. Political Science, Wellesley College

Dr. Margaret Jorgensen is a leading authority on assessment for K-12 education. She is the author of two books on innovative assessment and dozens of articles and chapters, and has developed hundreds of criterion-referenced, standards-based, and norm-referenced tests for K-12. She has worked for both Educational Testing Service and ACT, and led education products in the K-12 assessment space for Harcourt Assessment. At Harcourt, Dr. Jorgensen was responsible for the development of all norm-referenced achievement and ability products. For example, Dr. Jorgensen was responsible for the development of the innovative 10th edition of the Stanford Achievement Test, the 3rd Edition of Apenda®, the Stanford English Language Proficiency Test, and the 8th Edition of the Otis Lennon Ability Test. *(continued)*

In addition, Dr. Jorgensen has led the development of literally thousands of standards-based assessments, including accountability tests for Alabama, Arizona, California, Delaware, Florida, Georgia, Virginia, Massachusetts, Michigan, Mississippi, New Mexico, Ohio, Rhode Island, South Carolina, Texas and Virginia and online assessments.

Dr. Jorgensen is knowledgeable in all areas of assessment and has pioneered innovative item types and assessment formats, designed friendly and useful score reports linking assessment information to instruction, and authored books and articles — all initiatives focused on more meaningful ways to systematically capture evidence about what students know and can do. She has advised both large and start-up technology companies in the assessment space since 2006 including Pearson Vue (adaptive licensing examinations) and DreamBox Learning for K-3 mathematics.

Dr. Jorgensen founded Measure2Learn, LLC, in 2007 to provide research and statistical services in the K-12 product space, conduct research and evaluation, build assessments and instructional resources, and inform and collaborate with clients on the national education reform landscape. Measure2Learn is a small, nimble entity with collaborators from various disciplines and with a range of expertise including data analysis, content development, alignment, and program or product evaluation. Measure2Learn clients include Pearson Vue, Rally Education, DreamBox Learning, Princeton Review, National Taiwan University, the University of Missouri-St. Louis, and Learning Through Sports.