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

Compiled by

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

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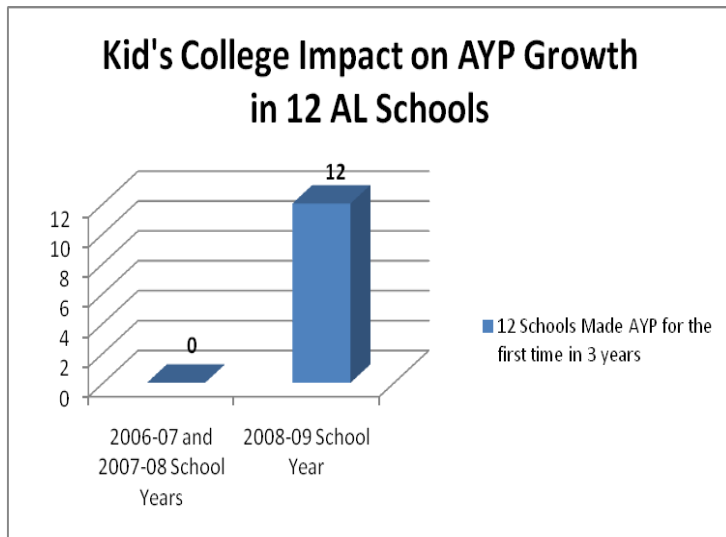
Overview

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 Alabama. This research spans from fall 2007 through spring 2010 and demonstrates the efficacy of Kid’s College in helping districts improve Adequate Yearly Progress (AYP) results.

Kid’s College Impact on AYP in Alabama Schools

In 2008-2009, the most recent year for which AYP information is available, 12 out of 16 schools using Kid’s College and who had not made AYP for either 2006-2007 or 2007-2008 made AYP. This includes 6 high schools, 3 middle schools, 3 elementary schools and 1 alternative school.

Figure 1: Kid’s College Impact on AYP in 12 Alabama Schools



Digging deeper into the data from five schools that have continuously implemented Kid’s College since a pilot year in 2006-2007, the impact on their percent of students at or above proficiency beats the overall state percent in 12 out of 17 categories (grade by subject) in Reading and 11 out of 17 categories (grade by subject) in Mathematics. And, 9 of the 12 categories in Reading have percent increases from 2.07 to 14.69 percentage points above the state average increases for students at or above proficiency level. In Mathematics, the data reveal the same trend. For the Kid’s College users, 8 of the 11 categories exceed the state percent increases by between 3.12 to 18.6 percentage points.

Figure 2: Reading Proficiency - Kid's College School Gains Exceed State Gains

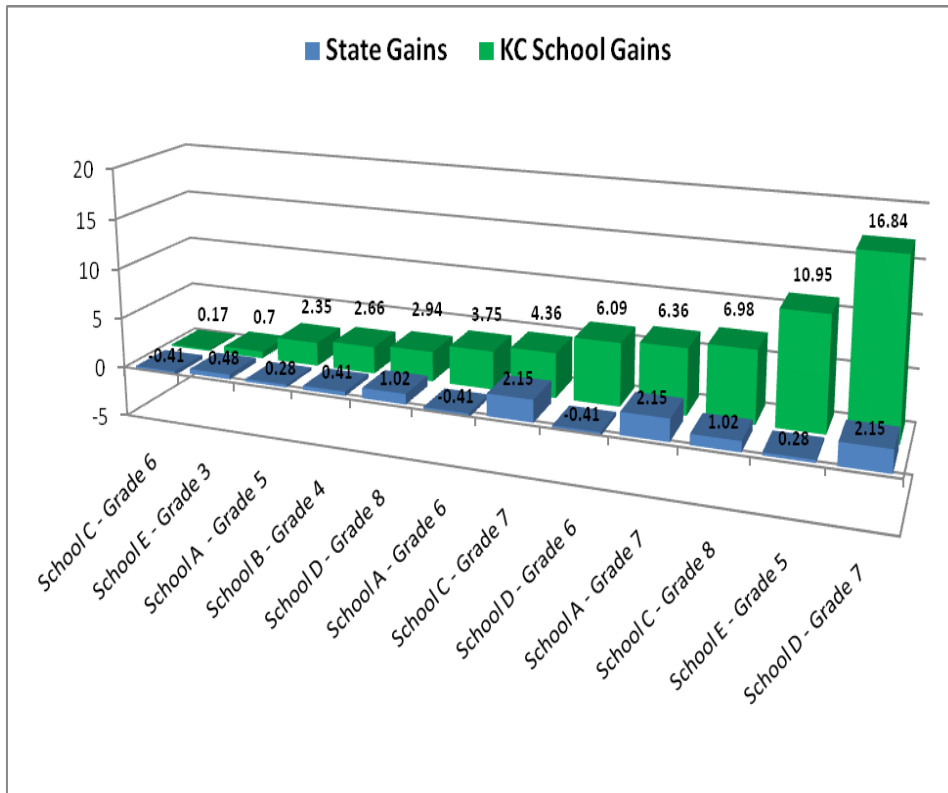
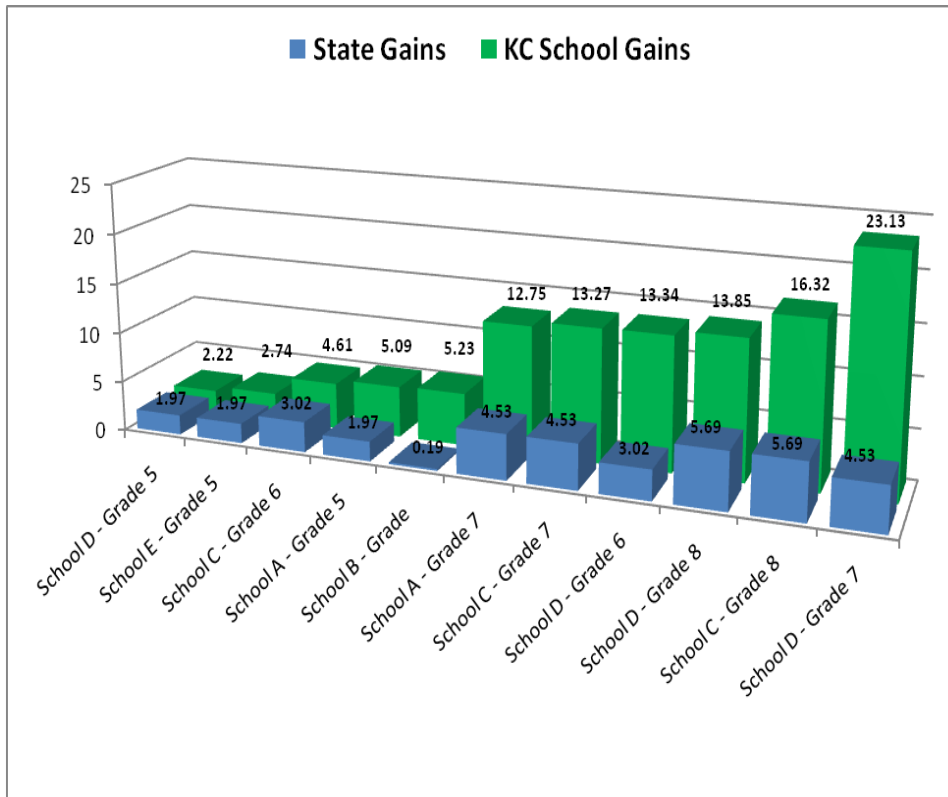


Figure 3: Mathematics Proficiency - Kid's College School Gains Exceed State Gains



The Story Behind Improving AYP

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 Alabama 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 Alabama core curriculum standards to assist with test preparation for the ARMT (Alabama Reading and Mathematics 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 4, after a pilot in five schools in 2006-2007, the implementation of Kid's College across Alabama grew by 165 percent through 2008-2009. Currently, 156 schools and 63 after school programs are utilizing Kid's College in Alabama, for a total 219 sites. Use of Kid's College by the 156 schools is consistent at approximately 80 percent of work during normal school hours and 20 percent of work after school hours. Students answer on average about 600-640 questions each per year. In an individual session, they spend 30 minutes on average and answer 20-22 questions.

In 2008-09, students collectively answered over 39 million Alabama standards-based skills questions. As of spring 2010, students are on track to surpass this number (Figure 5).

Over a three-year span, the time engagement in Kid’s College is also on an upward trend. Students collectively spent more than 16 million minutes utilizing Kid’s College during 2008-09, up from 12 million minutes in 2007-08. The average time engagement in Kid’s College per student has increased from 262.88 minutes in 2007-08 to 281.04 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).

Figure 4: Growth of Kid’s College Implementation in Alabama

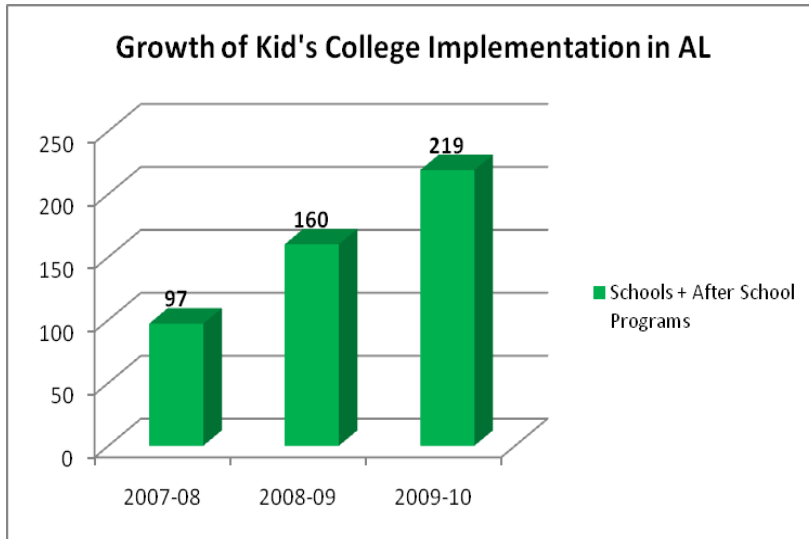
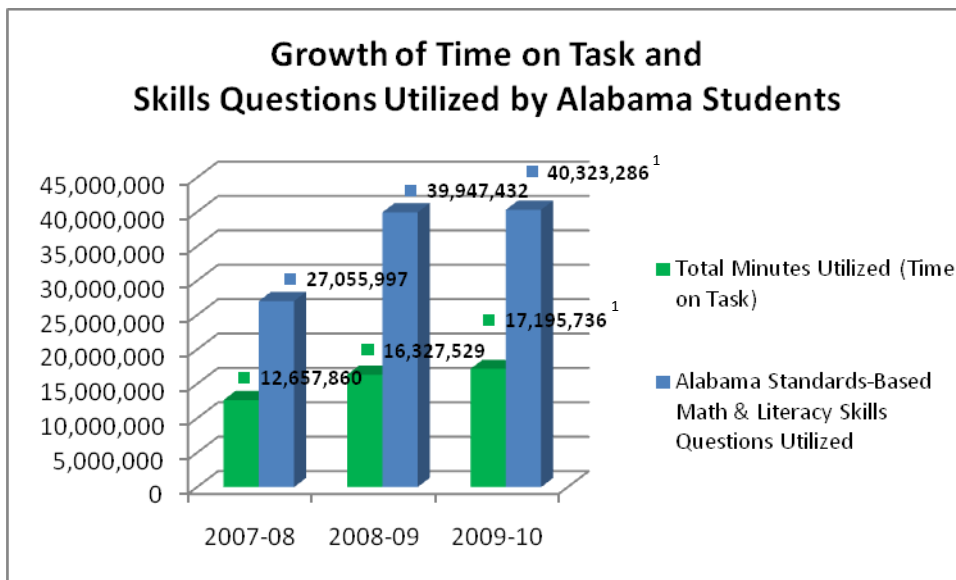


Figure 5: Growth of Time on Task and Skills Questions Utilized by Alabama Students Using Kid’s College



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

Impact on Students

Research studies are often only about data. But it is helpful to dig into those data and find a story of success and achievement that in many ways underscores the real power of instructional tools that students want to use.

Rashad was a fourth grade student in the pilot year of Kid’s College in Alabama. His principal describes Rashad as difficult to motivate. “He shows up in my office for getting into things more than he should...” But Rashad is motivated by Kid’s College. Rashad worked in Kid’s College whenever and wherever he could find a computer and get online – in libraries, at friends’ homes, in the school computer lab, and in his own home. Eighty-one percent of his time in Kid’s College was outside the normal school day on his own will (Figure 6).

Rashad answered 7,400 questions over a five-month period. This is an average of 370 test questions every week. Rashad’s investment of time in Kid’s College paid off for him. In five months, Rashad’s reading fluency increased by 35 percent (Figure 7). He was no longer difficult to motivate because he was now able to read on grade level. In specific skill sets, Rashad increased his proficiency by three grade levels.

Figure 6: Student Rashad – Time Spent During and After School Hours in Kid’s College

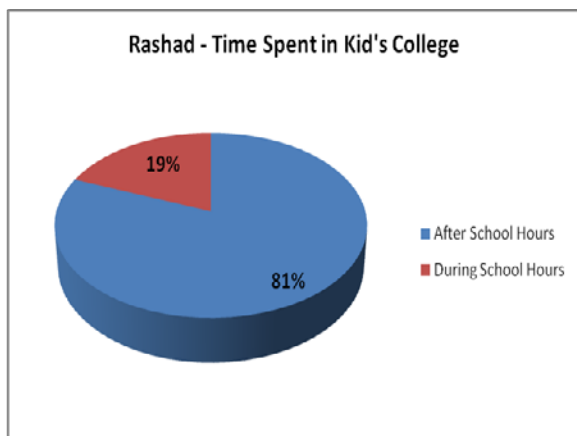
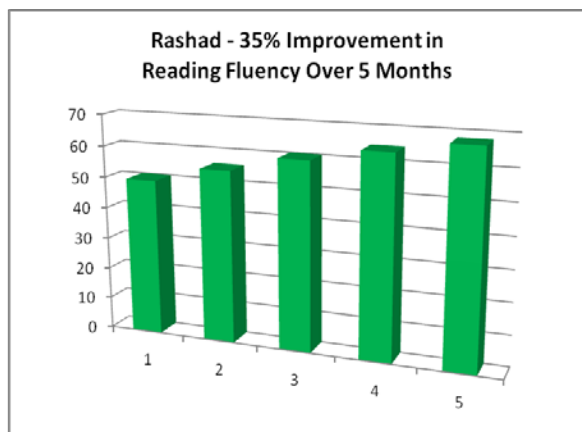


Figure 7: Student Rashad: 35% Improvement in Reading Fluency Over 5 Months



Conclusion

These data demonstrate the power of Kid’s College in helping districts improve their AYP results, in helping schools improve student learning, and in helping individual students overcome tremendous obstacles and become engaged in school. Underlying each of these benefits is the power of an engaging learning tool that delivers differentiated instruction based on real time assessment of every student.

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 Aprenda®, the Stanford English Language Proficiency Test, and the 8th Edition of the Otis Lennon Ability Test.

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. *(continued)*

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.