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**Research Findings on the  
Impact of Kid's College on  
Student Achievement in Urbandale, Iowa**

Compiled by

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# **Research Findings on the Impact of Kid’s College on Student Achievement in Urbandale, Iowa**

## **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 Webster Elementary, a public school within the Urbandale Community School District of Iowa. Webster Elementary is one of 6 elementary schools in Urbandale CSD and serves 283 students in Kindergarten through fifth grade.

This research spans from fall 2009 through spring 2010 and demonstrates the efficacy of Kid’s College in helping Webster Elementary improve Reading and Mathematics scores on the Iowa Test of Basic Skills (ITBS).

## **Kid’s College Impact on ITBS Scores**

Webster Elementary supports the belief that “all children can grow academically.” In their 2008-09 End of Year Report and School Action Plan, they cite several strategies to achieve this goal. One strategy Webster Elementary proposed in its plan for the 2009-10 school year was “to align the appropriate interventions with student learning needs to help children be successful.”<sup>1</sup>

Kid’s College is one of the new initiatives and programs that Webster Elementary is implementing to help all students move to the next level of their education through differentiated and individualized curriculum and instruction.

Webster Elementary serves a primarily White student population (88 percent). Seven percent of the student population are Asian/Pacific Islander, 3 percent are Hispanic, and 2 percent are Black. Three percent of students are eligible for the free or reduced lunch program.

Webster Elementary students who used Kid’s College made marked improvement in their Iowa Test of Basic Skills (ITBS) scores in both Reading and Mathematics.

## **Webster Elementary ITBS Improvement Data and Kid’s College Usage**

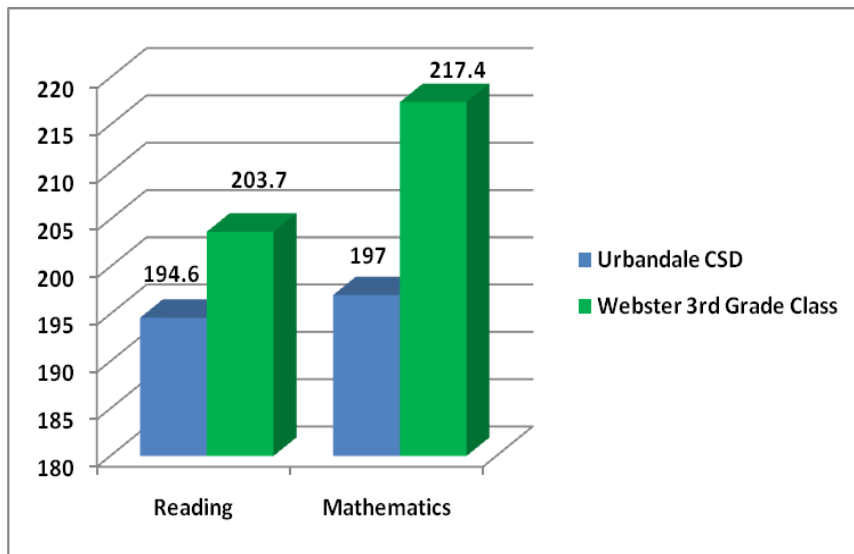
This research focuses on one Webster Elementary third grade classroom that showed consistently high usage since implementing Kid’s College during the 2009-10 school year. The teacher used this tool in the classroom to support the individual learning needs of students. The teacher also made this tool available to students for additional instruction from home and outside normal school hours.

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<sup>1</sup> [http://www.urbandaleschools.com/uploads/schools/we\\_eoy\\_action\\_plan\\_0809.doc](http://www.urbandaleschools.com/uploads/schools/we_eoy_action_plan_0809.doc)

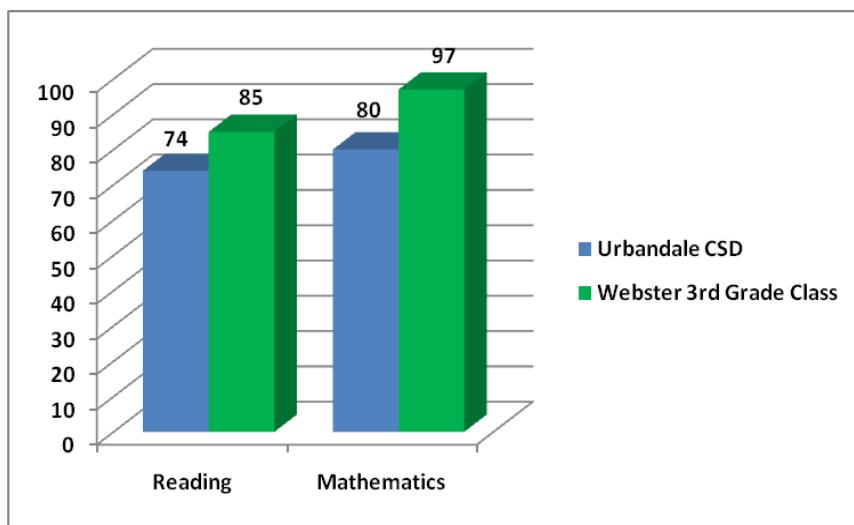
Results on the 2010 ITBS show that the Average National Scale Score (NSS) for the Webster Elementary third grade class utilizing Kid’s College exceeded the average NSS for the Urbandale Community School District as a whole. Average NSS for the third grade class exceeded average NSS for the district by 9.1 points in Reading and 20.4 points in Mathematics (Figure 1).

**Figure 1: Comparison of Scores for Webster Third Grade Class vs. Urbandale Community School District on Average National Student Norms (NSS)**



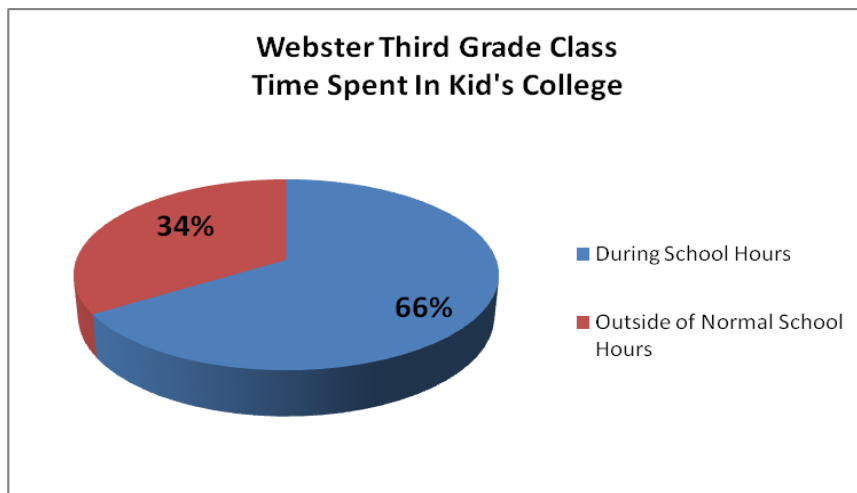
Furthermore, the National Percentile Ranking (NPR) of Average National Scale Score (NSS) for the Webster Elementary third grade class also exceeded the NPR of Average NSS for the district by 11 points in Reading and 17 points in Mathematics (Figure 2).

**Figure 2: Comparison of Scores for Webster Third Grade Class vs. Urbandale Community School District on National Percentile Ranking (NPR) of Average NSS**



Overall, 28 students in the Webster Elementary third grade class answered more than 62,422 Iowa core curriculum-based questions. They spent more than 480 hours working in Kid's College. 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). On the average, these 28 students answered more than 2,229 questions and worked more than 17 hours in Kid's College. Sixty-six percent of the time working in Kid's College was spent during school. Thirty-four percent was spent outside of normal school hours (Figure 3).

**Figure 3: Time Spent in Kid's College During and Outside of School Hours**



### **The Story Behind Improving ITBS 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 Iowa 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 Iowa core curriculum standards to assist with test preparation for the ITBS (Iowa Test of Basic Skills).

4. Customized Study Guides 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.

## **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 (ITBS). Students can accelerate their achievement growth when supported by the right tools. The right tools provide differentiated instruction and align to the state content standards for all students. The achievement growth for Webster Elementary students using Kid's College indicates the power of differentiated online instruction.

## **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.

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### **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 3<sup>rd</sup> Edition of Aprenda®, the Stanford English Language Proficiency Test, and the 8<sup>th</sup> 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.