

The Diffusion of Classworks

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### The Setting

Winder-Barrow Middle School, located in Barrow County, Georgia. Winder-Barrow Middle has a student population of approximately 745 students composed of 63% Caucasian and 27% minority. Winder-Barrow Middle School serves grades 6 – 8 and has approximately 50 teachers on staff. 52% of the students are receiving free and reduced lunch. Barrow County is a growing, rural community situated between Gwinnett and Clarke Counties in Northeast Georgia. Barrow County has a population of approximately 70,000 people and a median household income of \$51,283.

While the median household income of Barrow County is substantially higher than the state average income of \$40,080, the average household income of students attending Winder-Barrow Middle School is approximately \$42,000. Winder-Barrow Middle School's students range from some of the most expensive neighborhoods in Barrow County to very poor areas. The motto of Barrow County Schools is "World Class Education ... Hometown Values." The school system has been awarded numerous honors: Dr. Sheila Kahrs of Haymon-Morris Middle School was awarded the honor of NASSP National Middle School Principal of the Year; Superintendent Dr. Ron Saunders was named the 2008 Georgia Superintendent of the Year and the 2008 Tech-Savvy Superintendent of the Year; among many other recognitions and honors.

### The Innovation

As part of the School Improvement Plan for Barrow County Schools and Winder-Barrow Middle School, a focus has been placed upon improving scores on the Criterion Referenced Competency Test (CRCT), specifically in math. For the 2008-2009 school year, the breakdown of CRCT scores in math is as follows: 6<sup>th</sup> grade – 65.1% meets and exceeds, 34.9% does not

meet; 7<sup>th</sup> grade – 75.3% meets and exceeds, 24.7% does not meet; 8<sup>th</sup> grade – 62.1% meets and exceeds, 38.1% does not meet. While we did make Annual Yearly Progress (AYP) for the 2008-2009 school year, we were among the lowest in the county.

In an effort to improve math scores, Winder-Barrow Middle School has adopted Classworks, a computerized remediation program distributed by Curriculum Advantage. Classworks is a research-based program that allows students the opportunity to work on lessons to improve their math scores. Teachers have the chance to select the lesson for the students to work on – either individualized or by class – and can select from a multitude of lessons at different grade levels in order to meet the needs of the student or class. The students are provided with a lesson and then given a quiz. If the student does not perform at a teacher directed level of achievement, he is sent back to complete remediation assignments. Once he has completed the remediation assignments, he completes another quiz. When a student is successful in completing a quiz, it is assumed that he has mastered the basics of the lesson, and he moves on to project based assignments, allowing the student an opportunity to “demonstrate mastery through real world application of knowledge and critical thinking related to the skills learned” (Comprehensive K12 Instructional Software, 2009).

### The Implementation

Classworks was purchased in 2009 by Barrow County Schools with a site license that allowed installation on each computer in the school during March of 2009. The program is designed to replace “other grade- or population-specific programs, which may result in a lower overall cost to the school and relieves the pressure on teachers and technicians to manage many different programs” (Classworks, 2008). The math and language arts teachers at Winder-Barrow Middle School were given a tutorial session by a representative from Classworks during an after-

school meeting. As the technology in the school is a conglomeration of dated and updated items, it was a frustrating start for Classworks with information not loading and the locking down of computers. However, through the few months of last year, updates for Classworks and our servers were installed, which helped to alleviate some of the frustration. This year, the math teachers were given a tutorial on the updated features of Classworks at a school wide math meeting. In order to ensure that students are getting an opportunity to use the program on a regular basis, each math class is scheduled to visit the computer lab once a week and work on lessons assigned by the teacher. The math connections class also visits the lab weekly to use Classworks, so these students are receiving remediation twice a week.

### The Analysis

As the 2009-2010 school year is the first academic year in which Classworks will be utilized by Winder-Barrow Middle School, there is no data to backup the use of the program. Therefore, it cannot be deemed a success or a failure in terms of the students' test scores. It has, however, been a success in other schools around the nation, so it is also expected to be successful at Winder-Barrow Middle. For example, DeLaura Middle School in Satellite Beach, Florida, experienced gains in the Florida Comprehensive Assessment Test (FCAT) after using Classworks for just one year. The gains made by the lowest quarter of students were "especially apparent. Within this group, 85 percent made learning gains [in math], compared to 68 percent district-wide. In addition, the school climbed to eighth in the state rankings, up from 13th in 2007 and 46th in 2006" (Schools Using Classworks, 2009).

The expected success of Classworks corresponds with Ely's Conditions of Change model. According to Ely, Ellsworth cites the first condition for change as a "dissatisfaction with the status quo" (2000, p. 67). The faculty at Winder-Barrow Middle certainly was not content

with being at the bottom of the barrel in terms of test scores as compared to the other middle schools in the county. Prior to Classworks, there was no school wide program for remediation of mathematical concepts. This was certainly an issue among the math teachers in their own classes and with the afterschool program at Winder-Barrow. The change to Classworks was “voluntarily embraced” by the teachers due to the successes that the Classworks representatives were able to provide (Ellsworth, 2000, p. 67).

The second condition to Ely’s model is that there must be “sufficient knowledge and skills to do the job” (Ellsworth, 2000, p. 68). As Ellsworth reflects, this is probably the weakest of the areas upon the implementation of Classworks (2000, p. 68). The teachers were provided with a brief training session and a lengthy packet and sent on their way to set up their classes, navigate through the thousands of lessons to select the ones for the students, and schedule time for their students to use the lab. Many teachers felt overwhelmed by the process and shied away from using Classworks. However, since the initial program that was purchased, there have been many changes made. The program is much more user friendly and, since its implementation at the end of the 2008-2009 school year, teachers have had the chance to work with the program and streamline the process.

Another weakness to the initial implementation of Classworks was Ely’s third condition for change – the availability of appropriate resources (Ellsworth, 2000, p. 69). The availability of the technology was sketchy, at best, when the program was installed. Some of the computers worked properly and others did not. This was a hurdle for teachers when taking an entire class to the computer lab, as it is a struggle to maintain order on middle school students with nothing to do. However, the Classworks representatives worked with our media specialist to help correct

these issues. Through the months since initial installation, there have been fewer problems with the technology.

According to Ely's fourth condition, there should be ample "time to learn, adapt, integrate, and reflect on what [the implementers] are doing" (Ellsworth, 2000, p. 69). The initial training and the retraining this year have provided the teachers with the chance to experience and experiment with the technology. Ellsworth states that "time is a vital element in the total process of educational change," clarifying that "good time [is] paid time" (2000, p. 69). It would be quite impressive if all training for new programs was provided during the hours of 8:00 AM and 4:00 PM, but this is just not reasonable. However, Winder-Barrow Middle School coordinated with Classworks to provide multiple sessions of training for experienced and new teachers to the program, during some planning time (compensated) and also after school (uncompensated).

The fifth condition states that there should be "rewards or incentives ... for participants" (Ellsworth, 2000, p. 70). The rewards in Classworks are a mixture of intrinsic and extrinsic – teachers and students will have the pride of an increase in learning and test scores, while students, especially those in eighth grade, will have the extrinsic motivation and reward of promotion to the next grade. It certainly is a great reward to the teacher to see her students respond to the material in a new way and for this excitement to be reflected in test scores, both in class and standardized.

Ely's sixth condition of "participation [being] expected or encouraged" is certainly evident in the implementation of Classworks (Ellsworth, 2000, p. 71). The teachers are required to take their classes to the lab on a weekly basis. The county mandated that the program be used and not just sit on a computer in the lab. While teachers were given this mandate upon initial installation of the program, the school administration was cognizant of the fact that CRCT was

only a few weeks away and teachers still had content to cover in the classroom. The teachers were allowed to use the program as needed during the 2008-2009 school year. The start of the 2009-2010 school year, however, began with a schedule that indicated when each math teacher would take his/her classes to the lab for Classworks.

### Resources

Comprehensive K-12 Instructional Software Accelerates Student Learning. (2009). Retrieved October 7, 2009 from Classworks by Curriculum Advantage, Inc. Website: <http://www.classworks.com>

Classworks report shows student improvement. (2008, December 30). *Tech & Learning*. Retrieved October 7, 2009 from <http://www.techlearning.com/article/14944>

Ellsworth, J. (2000). *Surviving change: a survey of educational change models*. Washington, DC: Office of Educational Research and Improvement.

Schools Using Classworks to Prepare for State Tests Report Significant Test Score Gains (2009, April 21). Retrieved October 7, 2009 from PRWeb. Website: <http://www.prweb.com/releases/2009/04/prweb2344204.htm>