BLENDED OPERATIONS

By W. Wesley Watts Jr.

Many educators are familiar with the term "blended learning", a term used to describe a teaching practice in which a student receives classroom instruction part of the time and online instruction the remainder of the time. The online instruction component allows a student to control the time, pace, and place of learning. Hold this thought while you are reading this article.

Introduction

A few years ago when Prince George's County Public Schools was experiencing massive budget cuts, layoffs, and overall low employee morale, an innovative idea surfaced as a means to lower costs, improve inventory control, and provide an incredible opportunity for students. The idea was to create an IT High School and move some of the district's IT Operations into the school. With several school buildings vacant at the time, the district was searching for innovative educational programs to reopen and reinvigorate the community schools. Unfortunately, the IT High School application was rejected and never happened. However, a new design was created to build an IT High Program and a Technology Distribution Center within a current high school. In Fiscal Year 2012, the first IT High Program and Technology Distribution Center was opened in Fairmont Heights High School.

IT High Program

The IT High Program is designed to support 90 students in each grade level, enrolling freshman in the first year and four years later having freshman through seniors in the program for a maximum of 360 students. All freshmen will take a computer repair and operating system course with the goal of A+ certification upon completion. Before their sophomore year, students will pick a major of either engineering or programming. For engineering students, they will take an Engineering I class which will consist of content to teach students how to deploy windows 7/8 in an enterprise environment. Upon completion of the course, students would have the opportunity to take a certification test for Windows 7 and Windows 7 Enterprise Deployment. Juniors and Senior will take the Certified Cisco Entry Networking Technician (CCENT) course with the goal of attaining a CCENT certification. For programming students, during the sophomore year they will take a Web Development Course. They will take a certification exam for both HTML5 and Javascript at the completion of the course. Juniors will take AP Computer Science that culminates with the corresponding AP Exam. Seniors will take a Mobile Programming Course that culminates with the development of a mobile application.

Technology Distribution Center

The Technology Distribution Center (TDC) is designed to receive, asset tag, image, assign (in inventory) and deliver new equipment purchased by the school district, repair damaged equipment that IT Technicians are not able to at their schools, and support the IT High Program at the high school. The Technology Distribution Center operates with a manager, an engineer, and IT Technicians. The TDC Manager is also responsible for supporting the schools and offices (50 to 100) within the TDC region. On a typical day, you will see students in the TDC repairing broken desktops, laptops, tablets, or phones. You may see an engineer or IT Technician in the

classroom speaking with the class about computer repair or networking concepts. When programming classes are in session, a programmer from the central office is in the classroom working with the teacher and students.

The Results:

Student Achievement:

Prior to FY12, Prince George's County Public Schools had fewer than 5 students pass IT certification exams annually through the traditional Career and Technology Education Programs. In FY12, Fairmont Height's IT High Program had 68 students enrolled and students passed 37 certification exams. In FY13, Fairmont Height's and Gwynn Park's IT High Program had 220 students enrolled. Students passed 91 certification exams. In FY14, Fairmont Height's, Gwynn Park's, and Duval's IT High Program has 391 students.

Savings:

Before FY12, when the school district purchased computing equipment, additional fees were paid to the vendor to asset tag, image, deliver, set up, dispose of the trash, and maintain the equipment. Now the district purchases the equipment directly from a computer vendor and handles the entire computing life cycle, saving millions of dollars annually. In FY12, the school district saved approximately $2,809,188. In FY13, the school district saved approximately $2,013,272 and in n the first six months of FY14, the district has saved over $1,400,000.

By blending "real" district operations with an innovative educational program, the district has managed to save money and provide additional technology to schools and offer a great program for students. This is Blended Operations!