### HOW ACELLUS WORKS IN SCHOOLS

Acellus has been deployed in public and private schools throughout the nation and is now helping hundreds of students each day to master concepts in mathematics. Traditionally, Acellus has been deployed in computer labs where each student has a dedicated computer and console from which to operate the Acellus programs. Acellus courses are interactive, self-contained educational programs that carefully guide the student through each lesson. The interactive features of Acellus are used to identify "holes" in the students' knowledge and understanding of specific concepts. Acellus then interactively provides specific video instruction taught by teachers identified as master teachers.

At the completion of the lesson on each topic, the student is challenged with carefully crafted questions to examine competency regarding the newly taught concept and reacting with special context-sensitive video response to eliminate misconceptions or incomplete mastery of the concept.

Acellus courses are self-contained, allowing students to move forward through the material at their own pace. Students already having mastery of a particular concept move through very quickly, making an introductory Acellus course an effective review procedure. Once a student encounters a topic or concept which contains new material, progress slows and the course slows down to help the student master the material.

Lessons are automatically scored and results tabulated in each student's record. Each time a student fails to answer a question properly, it is designated as a "sticky problem", which Acellus will revert back to later in the course to ascertain the student's proficiency.

Each Acellus course contains unit exams, midterm exams and final exams. Teachers are provided with a powerful but intuitive interface, allowing them to monitor the progress of each student through the course. Many of the parameters of the operation of an Acellus course can be managed by the teacher or, they can be left to operate with the Acellus default settings. The teacher also has control over the relative importance of each item used to generate student grades.

If a student fails to pass a unit exam at the required level of competency, Acellus automatically returns the student to the lessons related to each missed problem. Concepts are taught initially at the basic level, optimized for quick learners and persons using the material for review purposes. Students requiring additional instruction are given more in-depth presentations of each concept with some of the most difficult-to-master concepts being covered in four separate presentations with varying levels of complexity. Students that are really struggling will spend a little bit more time in these difficult concepts, but in the end they can master the material and pass the course.

Acellus courses have been found to be very effective in terms of building student self-esteem and in the mastery of material, as evidenced by improved final test scores compiled from independent testing. Acellus collects detailed information regarding the progress of all students in each course. This data is collected each night at the International Academy of Science and allows researchers to identify problem areas where the instruction needs improvement. This feature of Acellus makes a science of the learning process and allows courses to be rigorously monitored and refined. Course modifications and enhancements are distributed each day to schools using Acellus. This is the single most important reason that Acellus is so effective in helping students master difficult concepts.

Excerpted from <a href="http://www.acellus.com">http://www.acellus.com</a>

## ACELLUS GOALS FOR THE 2008-2009 SCHOOL YEAR

- 1. Train teachers in the use of the program and management of the system.
- 2. Use the program with selected groups of students to gauge student reaction and understanding of material presented.
- 3. Map Acellus math curricula against the WCSD math curricula to determine which topics might need to be taught individually.
- 4. Be prepared to use Acellus to alleviate small class sizes in math for the 2009-2010 school year.

#### WCSD IMPLEMETATION OF ACELLUS

October 2008	Mrs. Stewart and Mrs. Hetrick attended administrator training for Acellus
November 2008	Ms. Barrett and Ms. Joncas begin working together to learn to use the Acellus management system and how classes align with the WCSD curriculum.

January 2009	Mrs. Golab replaces Ms. Barrett and begins to learn the Acellus system.
February 2009	Mrs. Golab asked for Principals to identify teachers that needed to be introduced to Acellus. Teachers were added to Acellus record system. They were assigned Teacher privileges in order to review and manage student progress reports, reposition students, set class defaults and student options and monitor classes.
	Mrs. Golab printed teacher "Quick Start Cards" and
	distributed them to identified teachers.
	She then met with teachers individually and communicated
	through email regarding set up and passwords.
March 2009	Student licenses were requested and ordered for each
	teacher.
	The Technology Department provided assistance in getting
	network and teacher workstations set up. It was discovered
	that Acellus does not work with "thin client" computer set
	ups. So some teachers were not able to work at their
	desktops with this program.
May 2009	Mrs. Hetrick and Mrs. Golab met with Neil Kent who
	completed the work on course content and obtained outlines
	to be distributed to teachers at future workshop and shared
	through a common folder.
	Set up dates of June 1 <sup>st</sup> and June 8 <sup>th</sup> to have Acellus
	Workshop at Warren High.
	Discussed the plan to use Acellus during summer school
	with Mary Ann Mead, Principal.

## **RESULTS OF ACELLUS IMPLEMENTATION TO DATE**

To date we have purchased 382 licenses for district students to use Acellus. Acellus has been used this year:

at Eisenhower for AP calculus review prior to the AP test;

at Beaty Warren Middle School for remediation and acceleration;

at YEMS and YHS for special education classes as support and extra practice;

at WAHS for alternative education credit recovery.

During this process, we have found that the Middle School Acellus program is better suited to remediation and acceleration for students. It is designed as one large course for middle school math and we cannot pick and choose the sections to make courses, although we can just do sections that allow for extra practice.

The high school course work for Acellus is challenging and while the topics taught better match our academic curricula, these can be used by applied students because of the way that the material is re-taught until mastery is reached.

Student and teacher comments on the program were largely positive and teachers seem to be looking forward to a richer implementation next school year.

# **GOALS FOR NEXT YEAR**

- 1. Use Acellus to relieve scheduling problems for students.
- 2. Train more teachers to use Acellus effectively.
- 3. Allow for more credit recovery for students in their home schools.