

Maine School Administrative District #75 Timelines and Writing Process

A major focus of the Aiming for Excellence (AFE) staff's work is helping teachers differentiate their curriculum for all students. Differentiation, to put it succinctly, is a process by which teachers gather information about students and plan their curriculum based around these students' particular needs. With the implementation of the District's Comprehensive Assessment system, the most recent ESEA (a.k.a. No Child Left Behind), and a new School Committee initiative, the need to differentiate effectively becomes even more crucial. To support its differentiation efforts the AFE program is seeking to purchase and pilot two different types of software to: one will assist fifth and sixth graders with creating timelines and the other will help students in grades five through eight organize their writing more effectively. The ultimate goal is for to improve student learning while providing teachers with additional tools to meet students' needs.

During the 2004-2005 school year, the Aiming for Excellence will purchase enough software to pilot these programs in two elementary schools and the middle school. The money for this will come from the 2003-2004 budget line for supplies in the AFE program's budget. Some of the money may need to come from the 2004-2005 AFE budget. We estimate that it will cost between \$3052.80 to purchase 50 copies for the middle schools labs and 30 copies for each of the elementary schools, which includes shipping costs. The staff is already familiar with these types of software programs and, therefore, is ready to serve as trainers for classroom teachers. In addition to the software, the program is committed to purchasing laptops for its staff to make whole class presentations to classes and to demonstrate to teachers how they can use a single software program to plan differentiated lessons and units. Finally, AFE staff expects to work with focus and grade level groups to encourage the use of these programs and to develop curriculum that utilizes this software.

We anticipate that the first software program will assist students in creating timelines, a common assessment in sixth grade and a common task in fifth grade. Often students struggle with this type of lesson because they are so focused on the mechanical task of drawing lines, spacing time periods evenly and printing in letters small enough to fit in tiny spaces. Having this software available for students and teachers will serve a few crucial functions in improving student achievement and teacher instruction. First students will have an easier time creating these time lines because the software will do the physically complex tasks of spacing, creating small text and the such. In addition, we predict that students will add more details to their timelines because they're neither concerned about running out of space nor fatigued from the physical act of making the timeline. They will demonstrate more of their knowledge, which will give teachers a better view of student achievement and, we hope, students will perform better on common assessments and other classroom tasks involving timelines. This in turn will lead students to spend more time on the analysis of events and the connecting of events to each other, which is a skill on which the more academically capable students should be focused.

Having this tool available will also help teachers meet the different levels of students in their classes. For example, while a teacher would expect all fifth graders to make a timeline and even explain the significance of particular events, many different additional layers could be added to the timeline project. Some students might be asked to make overlapping timelines and try to make broader connections between events occurring simultaneously in different

countries or on different continents. Other might explore social, technological and cultural events that are taking place at the same time as political events. Meanwhile, a third group might trace the evolution of English law and its impact on the American Revolution (a fifth grade benchmark) in part by adding to its timelines. Time lining software also enables students to present information in chart form and lists, which helps students who need material presented in a more linear fashion.

This type of software also has applications in other curriculum areas. For example, teachers could differentiate their literature studies by having students plot the action of the book or the behavior of a character or the arc of dramatic action. Visual learners would benefit from this type of approach.. In a similar vein, time lining software programs frequently have a geological era component, which would be useful in science and geography classes.

The second type of software should also help improve student achievement and assist teachers in their differentiation efforts. Students enter different grades having different abilities to organize their thoughts, ideas and the information they've learned. Therefore, we anticipate that if students had a software application that would facilitate the organization process, students would demonstrate an increased capacity for thinking and writing. Their increased performance would not come simply from using the software, but from the focused instruction that teachers would do using it. For example, a teacher could plan lessons for students who struggle with organization at the most basic level—a big idea and three supporting details. Other students might work on creating more sophisticated arguments, while another group began to look for patterns among different thoughts. Students who need visual graphics, such as different shapes for different types of ideas, would benefit from this type of program as well. After using this software, we believe that students would demonstrate an increased ability to organize their writing ideas, even when they write without using the software.

As with the time lining software, the applications aren't limited to a single curriculum area. In seventh grade science, students study photosynthesis and respiration; they could use this program to show the stages in these processes. Fifth grader studying body systems might organize their knowledge about each one and draw conclusions about its interaction with other systems. In mathematics, students could create flow charts to explain problem-solving methods. Again, the goal of using this software is to increase student understanding and performance.

The initial costs for this part of the pilot is \$5200. The Aiming for Excellence Program will purchase 100 copies for the non-Title I schools (K-8) and Title I funds will pay for the other 100 copies.