

CMST Challenge Project

Thinking Outside the Box :

Using Stella in the Reading Classroom

Jennifer Rees

Abstract

Each school year, the students at Dr. Freddie Thomas High School participate in the 25 Books Campaign. This campaign requires students to read 25 books during the school year. Research shows that by reading 25 books, students will read approximately 1 million words, leading to an increase in their vocabulary of 3,000 words. In order to reach this long-term goal, students must be able to set and evaluate short-term goals based on their reading rate.

Why Stella

Stella was used because it allows for the inclusion and manipulation of many variables, as well as its ability to provide a visual representation of information. There are many variables that need to be considered when evaluating whether or not a student might meet the 25 Books Campaign goal. Stella allows variables like the number of books already read, the number of pages per book, pages read per day, etc. to be taken into account when helping students build their short-term reading goals.

Problems Encountered

When I joined the CMST Institute at SUNY Brockport, I was a Special Education teacher co-teaching Middle School Math. However, as the 2005-2006 school year approached, I had the opportunity to help pilot a new Reading program in my school. I struggled with the thought of leaving Math after I had spent the summer learning the amazing, innovative tools provided at the CMST Institute. In the end, I believed that I could best serve the students by joining the Reading program. This was my first problem... I figured that it was going to be quite difficult implementing the tools learned at CMST if I wasn't even teaching Math.

The good news is that I found a very important use for Stella inside my reading classroom! As explained above, students at Freddie Thomas, as well as many other schools, participate in a campaign that encourages them to read at least 25 books in one year. In the first few weeks of school, I saw a heavy reluctance to reading within my classes. I wanted to get students excited about reading and more willing to read on their own. Therefore, I began to develop individual goals with the students. However, in order to develop the goals specifically to meet each student's individual needs, we needed a method of evaluating their current progress. This is where Stella comes in.

I first thought of Stella as a means to merely calculate the number of pages a student reads each week. Once I began building the model, I realized that there are so many different factors that go into the reading done by my students. These varying factors include :

- ➡ Number of pages read at home
- ➡ Number of pages read at school
- ➡ Total number of pages read

- Average number of pages read per day
- Average number of pages in one book
- Number of books already read

So, as seems to happen whenever I begin a Stella model, it just kept growing and growing. The students and I would have discussions about the different factors that should or should not be included.

Ultimately, we ended up with the model that is included in this Challenge Project. It helped many students evaluate their reading rate, not just one time, but many times. Because the model takes into account the reading that you have already done and the number of weeks left until the end of the school year, it can be run at any point to evaluate whether or not a student is on his/her way to meeting the 25 Books Campaign Challenge.

As a whole, this experience was rewarding in many ways. I was excited and pleased to be able to use the modeling software in my classroom after all, even being a Reading teacher. It was also rewarding to see the students get excited about reading. Students seem to connect more where technology is involved, and I think that using Stella definitely got more students involved in my class and in their own reading. Students were able to write more concrete and reachable goals based on their analysis of the information provided by their interaction with Stella. As a whole, I was pleased with this experience in my classroom.

Curriculum Standards Addressed

This project is in alignment with the New York State English Language Arts Core Curriculum Guide, which :

- Recognizes that English language arts learners must be exposed to regular and varied opportunities to read
- Guides students to read a minimum of 25 books or the equivalent, per year, across all content areas and all standards
- Recognizes that equity in and access to technology and other resources must be ensured at State, regional, and local levels and enhances the development of critical literacy competencies
- Focuses on students as active learners, responsible for and knowledgeable about their own learning