Alice in Elementary School: Lessons from the Front Line

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This presentation will focus on the challenges and successes experienced by one school as it attempted to incorporate Alice into the fifth grade curriculum. Eagle* Elementary is located in a rural section of North Carolina. It serves a pre-K through grade 5 population of approximately 470 students. Although some of the students come from families employed in one of the nearby universities or North Carolina’s high-tech sector, the majority of students come from families in poverty. Based off our work, we can divide our “lessons learned” into three major components: program structure, necessary tools, and student achievement.

Regarding structure, as part of the school schedule, occasional Fridays are designated as “enrichment days” for fifth graders during their normal specials time. Enrichment classes are mini-courses taught by specialists and other non-classroom personnel for students who have completed their work. Students are allowed to self-select into enrichment classes that match their interests. Alice was offered twice during the year as an enrichment class option. During the year, a total of 11 students signed up for the course, including two who signed up for both semesters. Students came from a wide range of abilities and included students served both through the gifted program and through traditional special education. Although this allowed a variety of learners access to Alice, the inconsistent schedule posed problems. Next year, we will look at ways to combine the exploratory aspect of the “enrichment days” with more purposeful, targeted Alice investigations.

A second major lesson learned related to the types of support materials needed. For example, students only had guaranteed access to their work in the computer lab. Although there are Internet-connected computers in all of the classrooms, the quality of the computers and student access to computers during the regular instructional day varied greatly. Furthermore, students varied in their access to technology outside of school: whereas some students had significant access from a very early age, others lacked access to either a computer or the Internet. In addition to computer access, the “enrichment” structure of the program affected the kinds of curriculum materials we used. Going forth, we will need to look at ways to combine aspects of both pre-existing and teacher-created tutorials in order to meet the needs of a variety of learners as dictated by program structure.

Our final lesson learned related to student achievement. Through a combination of differentiated instruction and small class size, all students were able to achieve a measure of success with Alice. Student work will be exhibited as part of the discussion. For next year, we will gather data in a more purposeful, systematic manner in order to better understand the impact of Alice exposure on student choices for middle school and student self-concept with regards to STEM education.

*School name has been changed.