Introduction

Donaldson Way Elementary School and several other elementary schools in Napa Valley Unified School District have been assigned the task of designing and implementing a new technology elementary school model. The researcher and her colleagues have attended one summer training and visited two sites who are a year advanced in this purpose. The schools are working with New Tech Network to create a "21st Century" learning environment for 21st century elementary students. Additionally our team has attended the Buck Institute training for elementary teachers implementing Project Based Learning and are in our second year of implementation. Much of what we have been exposed to in our trainings and at school sites has been oriented around project based, small group centers in a technology rich environment. Both schools we have visited have much greater financial support for class size reduction and technology support and devices.

At our site, we in the beginning stages of implementation of centers based instruction and are exploring tools that will support our students in this learning environment. Our district has purchased ST Math, which we will be required to use next year for math instruction. This program will be included in our mathematics centers, which we have decided to expand next year. This year, at the fifth grade level we have focused on more fully implementing PBL into our classrooms, building several new units based on this model. We have used nonfiction text, summary writing, research techniques and report writing in our projects, as well as Science and Social Studies standards. We have taught our students to use presentation softwares and to site their sources appropriately.

We have incorporated much of this into our Language Arts Learning Centers this year, and as we move forward with this model, the researcher has developed an interest in finding and using a web based curriculum that addresses still more of our language arts standards.

The Problem

The researchers concern is twofold, she is interested in looking into web based curriculums for students to use in activity centers, and interested in ensuring that students are receiving quality grammar support for the writing they are producing in other areas of our centers program. Last year, the researcher attempted to evaluate several applications available on i pads but was unsatisfied with the results of this investigation.   The problem,therefor, is finding a way to determine if MobyMax can enable my students to learn the grammar skills necessary to become good writers.

Purpose of the Study

The purpose of this study would be to investigate the usefulness of MobyMax as a web based learning tool. Further to determing if it is a quality web curriculum for use in the classroom. Once a determination of its effectiveness or pact of effectiveness has been discovered, the researcher would like to share this information with her colleagues for use in Language Arts Centers time.

Research Questions

The researcher started with a broad idea of what she was interested in determining.

Is using web based curriculum sites an effective teaching approach?

Stemming from this question was,

Which web based learning sites are the best?

From here the researcher moved to,

What can MobyMax enable my students to do?

These are the guiding questions for the following research.

Review of the Literature

In this brave new world in which we live, where children have practically grown up with computers in their hands, we are charged with the job of examining and using these tools in our classrooms in the most effective ways for learning. In the interest of beginning to reimagine the learning environment of our students, classroom teachers must examine the roll that technology can play. We must take the time to research and discover what tools can and should be used by students. We must begin by looking at the research supports student centered learning and technology use. In order to find out what these tools might be, we must search out the most highly rated curriculums and approaches for supporting our students in these brave new classrooms. We must then focus on a particular program to discover what it can and cannot offer our students.

Theme 1

As the researcher started this process she began by researching the following article presented by Babette Moeller and Tim Reitzes; Integrating Technology with Student-Centered Learning, written for the Nellie Mae Foundation in 2011.

In summary this articles states that as we begin to extend education beyond tradition

boundaries and roles, we must examine the idea that student centered learning focuses on educational principles and practices that accomplish several goals; mastery of skills and knowledge, alignment with research on how people learn, and providing students with equitable access to 21st Century skills. As we move forward we must more clearly define for ourselves and our students what these principles mean to learning and we must pay more attention to the tools and resources that will best serve our needs. It is important that we understand and utilize the understanding that technology has great potential because it can be so readily customized, making differentiation easier for educators. Technology is also intrinsically motivating to students who have grown up in a world where knowledge and entertainment is at their fingertips.

Technology can help us to diagnose and meet individual student needs. According to the authors there are two main approaches to this. One is a mastery learning approach that is tied to an accountability system. In this scenario students take a placement test and are placed at the appropriate level of development. They advance through the standards based curriculum as they show mastery, (MobyMax does this) allowing teachers to benchmark them as they progress. A second approach assesses understanding in a way that allows teachers to witness the students thinking process. Both approaches provide a baseline for educators to serve as guides in the students learning.

The authors go on to state that technology can provide students with 21st century skills when used for purposes such as writing, research and communicating. It provides an active and often student driven learning experience. They further note that while there are models in place for us to study we ultimately must do what fits best with our student population and resources. Though we face many obstacles use of technology is critical. When done right it can provide individualized learning in an inexpensive way. And it can provide learning experiences that are adaptive and student centered, allowing learners to have varied experiences that build on their strengths and interest.

And after all isn't that when we are most engaged.

This article supports the researchers beginning question, aimed at understanding the use of web based curriculum. Suggesting that one aspect of technology infusion can and should be based around skill mastery.

Theme 2

The research then led to this article; "Inclusion in the 21st Century Classroom: Differentiating with technology." by Bobby Hobgood, ED.D. and Lauren Ormsby In this article the authors address the wide diversity that is a part of the 21st century classroom. Not only are there more students with defined disabilities , classrooms are also more linguistically and culturally diverse as well as socioeconomically diverse. Add to this the gifted student and the challenge of meeting all students needs increases for educators. The authors state that based on this growing diversity it becomes more important for educators to master the skill of diversification. While the idea of diversification is not new, it does lead to a classroom that features specialized instruction for all students. And even though research supports the practice of differentiation teachers are not using it in most modern classrooms. Technology can play an important roll in this process of allowing teachers to differentiate in their daily instructional practices. The authors note that it is important that we look at technology as a tool and that we should be focusing on the outcome of the instruction and not just on the use of the technology itself.

As educators working towards differentiating, we need to be focusing on our learning goals, activities and assessments that will shape the students learning. They further go on to state that as educators we should be operating under the perspective of the conceptual framework for education technology known as TPACK. Insuring that we are structuring learning experiences that are aligned with content that support learning goals. There are guidelines in place that emphasize that the tools selected and resources chosen for instruction follow the instructional plans not the other way around.

The power that technology has in differentiation is that it can allow the teacher to customize instruction, by manipulating the level and complexity of the content being delivered based on the students needs. Teachers can differentiate by content. They can differentiate by process as well. Teachers can also differentiate by product, voice and choice. Instruction can also differentiate by environment, creating a safe place for all learners.
They conclude by stating that we must be prepared for our classrooms to have a feeling of “controlled chaos”, as learners are given time and space to learn, communicate, creat and share their learning in order to grow. Finally concluding that differentiation can and should be accomplished in many different ways in todays classroom. Technology is an important tools that can support this change, but needs to be used as a part of well planned instruction, and not an end in and of itself. From this article the researcher concluded that finding the right tools was an important step towards meeting learning goals for all students.

Theme 3

The next step in the process led to more closely examining the choice of online tools available to educators and the effectiveness of these tools. The researcher found several articles that supported the validity of the online curriculum known as MobyMax. While research supports that there are many ways that technology can support learning, it is acknowledged that teachers must understand the purpose of the tool before deciding to bring it into their classrooms. There are two general distinctions about what computers can do for students, students can learn “from” technology , where programs are used essentially as tutors and serve to increases students basic sills and knowledge, and students can learn “with” computers, when technology is used as a tool that can be applied to a variety of goals. The researcher has had some success with the latter practice, but wants to know more about the former. The process of learning "from" a computer usually involves what is known as discrete educational software (DES). These software applications are widely available.

An example of a web based educational software that is of interest to this researcher is MobyMax. In an article written by Michael Karlin, on The Ed Tech Round Up, MobyMax was touted as "an outstanding online resource that offers a math, language, and reading curriculum for K-8 teachers. All lessons are aligned with the Common Core Standards and teachers can implement the service with very little work on their end". Students begin by taking a placement test and the results are linked to the teachers page for immediate viewing. Lessons are automatically assigned based on students level of placement when students log on, but teachers have the ability to assign certain lessons at any time. The program offers a lot of feedback for both teacher and students.

Also supporting the quality of MobyMax, is an article from EmergingEdTech.com, by Kelly Walsh,titled "MobyMax is a Proven Adaptive Learning Toolset with Differentiated Curriculum for k-8 Students". The author states that "the idea is to leverage scientific data to create an adaptive learning tool set that helps students and teachers identify missing skills" In the program progress monitoring is built in as well, using the find-learn-practice-review model cycle and integrated motivators, such as badges and game time. Students have been known to progress through curriculum much more quickly than normal delivery of the same material allows.

Summary

After review of the articles mentioned above, as well as others, this researcher is planning to implement MobyMax into her daily learning centers based instruction. The focus of her research will be

Language Arts skill mastery. The students in the researchers classroom have had ex-

perience with research and other softwares, as well as word processing. They will be exposed to a district adopted math program next year. The researchers goal is to see what MobyMax can do for my students grammar skills.

Research Methods

Project Introduction

Upon receipt of nine chrome books for the classroom, the researcher will begin a test of the grammar program that is part of an online program called MobyMax. Students will be asked to summit a writing sample before the test begins. Each student will write an essay to represent their beginning understanding of grammar. Next, students will take the built in placement test and begin working at the level they are assigned to. The researcher will monitor their growth as they progress. The students will use the program for thirty minutes daily, for two weeks time. This will provide the researcher with a snapshot of the students progress. The researcher will also collect anecdotal evidence from casual interviews and observations of the students before, during and after their use of the program. At the end of two weeks, the students will be asked to write a second essay on the same topic, to demonstrate growth or lack of growth.

Materials

The researcher will provide a topic for the writing assignment and paper.

The researcher will also sign up for and build a class on MobyMax
The research will print results.

Data Analysis Plan

The researchers plan is to look at the data provided by MobyMax. She would like to analyze the progress based on primary language skills as well. The papers will be read and compared for improvement in basic grammar skills. The anecdotal evidence will serve to inform researcher of student motivation and interest in the program.

References

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