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CEP 812

TechQuest: Study Island

Overview

Implementing a technology-based program such as Study Island may help improve students’ study skills and habits, as well as their test scores.

The Problem of Practice

The big push in school systems today is passing the state achievement tests. As a result, having students pass the achievement test is a top priority at Fostoria Community Schools. According to the Ohio Department of Education’s 2008-2009 School Year Report Card for Riley Elementary School, the school has been designated as showing “Continuous Improvement” ([reportcard.ohio.gov](http://ashleelgray.blogspot.com/reportcard.ohio.gov)). In order to reflect academic excellence and earn a higher designation, at least 75% of Riley Elementary students tested must score proficient or higher on the test. Currently, only 60% of all tested students at Riley Elementary scored proficient on the achievement test for this past school year.

In efforts to improve student success, practice achievement tests are administered every week, rotating in subject. This was done to give students another opportunity to practice answering questions formatted similar to the ones on the state test. We have found that many students are not properly prepared for the test. Therefore, on test day they panic and start to doubt their abilities. Giving students more exposure to the format of the multiple choice questions on the test will hopefully lessen the anxiety students experience on test day. This way they know exactly what to expect, and how to handle it.

Lesson plans and curriculum maps are designed to align with state standards, and therefore content on the achievement test. Much time and effort goes into guiding each student to success. However, we have to remember that each student is different in his or her educational needs. Students learn at different paces and with different depths of understanding. Implementing a program such as Study Island would help provide students with the individualized support they need in order to maximize success.

Study Island is an innovative website focused on providing instruction, practice and assessment based on state standards ([www.studyisland.com](http://ashleelgray.blogspot.com/www.studyisland.com)). This is a website that is made available to administrators, teachers, parents and students. Study Island focuses all of their materials off of state standards in order to provide authentic resources for each state. Students begin the Study Island program by completing a pre-test to determine what level they will begin at. From there, they can complete lessons and practice sessions based off of the state standards. Sessions are broken down by standard, and then furthermore by indicator. Students can complete a set of practice problems within each indicator, take a review over multiple indicators, and even play games based off of content within individual standards. Teachers can then track students’ progress, as can parents.

Providing students with timely and detailed feedback is essential to mastering skills. Giving feedback helps students identify their mistakes and further develop mastery. As noted by Jere Brophy in his research article titled *Teaching* he states, “To be useful, practice must involve opportunities not only to apply skills but also to receive timely feedback” (p. 22). While students are completing segments on Study Island they are given direct feedback on their progress. When students answer a question incorrectly, Study Island gives students a hint as to how to obtain the correct answer; therefore, guiding them to success. As an example, in a study section on fractions, students are referred to a help page in order to guide them through a practice problem correctly.

Also, students receive updates on their progress after completing a segment. Students must score a specified percentage in order to progress on to the next section. All of these results are available for teachers to access as well. Teachers can pull up a class report in order to see how students are doing, and where they are in the program. This data is also available to parents so they can track their student’s progress as well.

This feedback helps determine the success each student is having with the program. Essentially showing if it is effective for the students or not. To further determine the usefulness, staff could go back and compare results on Study Island to results on the achievement test. For example, if a student struggled with passing the mathematics portion on geometry and spatial sense, we could go back and review their progress on that standard in Study Island. If this was a section they struggled with during the school year, it would make sense that they struggled with it on the actual achievement test. On the other hand, if students are showing monumental success, and this success is shown on their achievement test as well, there may be a connection.

The Setting

There are many components necessary in order to make this program an asset to learning. First and foremost is the cooperation of the teacher. The teacher needs to make it a priority to find time to fit Study Island into the school day. It is important that students are given ample time to use the program to their benefit. We will be completing a schedule for each classroom that will allow students to practice on Study Island for 15-minute rotations. Our intervention period is thirty minutes long each school day. We can have four students on Study Island at a time in the classroom. Having two 15-minute sessions will allow for eight students out of each classroom to practice on Study Island daily. They next day, eight more students will be able to practice, and so on. If a specific skill is needed for a student, teachers can designate which topic they would like each student to focus on during their rotation.

In order for students to be enthusiastic about learning it is important that the teacher shares the same outlook. Having a positive attitude towards the benefits of Study Island and sharing that with students will help draw in their attention to the program. Teachers also need to have the training in order to maximize the use of the program. This includes attending training on how to use each component of the program, how to access student reports, and what the results on the student reports mean and how to utilize the results in order to achieve mastery in these standards. Training sessions will be held throughout the spring and summer, up until the launch of Study Island in the fall of 2010.

Students need to have a positive outlook on learning. By providing them with a non-traditional, Internet based approach they may be more intrigued to participate. Brophy also mentions “Research on learning tasks suggests that activities and assignments should be sufficiently varied and interesting to motivate student engagement,” (Teaching, p. 23). Study Island features a variety of ways to learn including lessons, practice sessions, interactive games and practice tests. These options provide students with variety, as well as a chance to have fun with learning by playing the games that are included in the program.

The next necessary component is the subject matter. Study Island focuses on all of the standards recognized in each individual state. The program is broken down by state, then by grad and then by subject area. For example, in alignment with Ohio standards for fourth grade, Study Island provides practice in math, reading, writing, science and social studies. The subjects are then broken down by standard and furthermore by indicators within each standard.

The final component to success is the actual classroom setting. In order for Study Island to be used to its fullest, there needs to be ample access to computers and the Internet. Ideally, this would be available in each classroom. Nearly every classroom at Riley has 4 computers with Internet connection. These would be available for individual Study Island sessions in the classroom. However, a school computer lab would also work. In order to further advance student achievement, access at home would be encouraged. This would allow students to log in at home and continue to practice for homework. All of the computers and their Internet connections will be updated before the start of the 2010-2011 school year. This will allow us to fully implement the use of Study Island in the classroom.

Technology-Integrated Solution

In order to raise the overall rating of Riley Elementary and showcase academic excellence in the students, test scores must be raised. Incorporating Study Island into the classrooms will help raise student success rates. Study Island is an innovative website focused on providing students with standards-based instruction, practice and assessment. By incorporating this program into our classrooms, teachers will be able to provide students with authentic practice that directly correlates to the state achievement test. This was a decision made solely by the Board of Education. They have incorporated the cost of Study Island into the technology budget, so that is not something we have to even address. What is in our hands, is how and when this program can and will be launched. We are to determine the technology updates needed, teacher training schedule, and implementation schedule- all of which are noted in this document.

To begin, the school district will need to purchase enough software for their students. This would mean providing each student with his or her own account and access. Teachers will need to be trained on the program and learn how to utilize features created just for teachers. The school will need to be equipped in order for students to have daily access to the Internet. A computer lab will work, however computers in each classroom would be most effective. The goal is to have four capable computers in each classroom. Teachers will need to implement a schedule for using Study Island. This practice should be incorporated into the daily intervention schedule, and be introduced to students in the beginning of the school year. Students will be able to track their progress not only through their schoolwork and grades, but also through their success on Study Island as well.

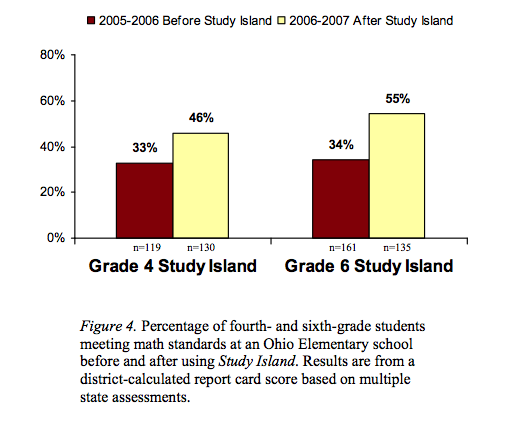
The program is designed to match the state standards. Therefore, teachers will be able to directly link their lessons with the sections on Study Island. For those districts that are fortunate enough, practice on Study Island could be given as homework. However, this is only possible if all students have Internet access outside of school.

In the article, *Computer-based instruction’s (CBI) rediscovered role in K-12: An evaluation case study of one high school’s use of CBI to improve pass rates on high-stakes test* by Robert Hannafin and Wellesley Foshay, it is stated that “students involved in a technology environment demonstrated increased achievement. Students also reported more favorable attitudes towards subjects when instruction involved the computer” (p. 148). By implementing Study Island in the classroom, it is hoped that students will take a more active role in their education. This program and the associated technology will be able to provide a new energy and spark in our students and in our classrooms, as well as a refreshing boost to achievement test scores.

Benefits of this Solution

There are many claimed benefits of computer-based instruction and the associated programs such as Study Island. In studies noted in their article, Hannafin and Foshay stated they “found that at-risk high-school students who used a customized CBI curriculum scored higher on state-mandated Mathematics and English tests that their classmates who did not use the CBI-supported curriculum” (p. 149). Many of the students at Riley Elementary are at-risk students. By implementing this program, it is hoped that these students will be able to obtain similar benefits.

Study Island will provide these students with the customized instruction that they need. Instead of putting pressure on teachers to differentiate instruction, this program will provide each student with a personalized path for success. As noted in Hannafin and Foshay’s studies, computer-based instruction does improve academic achievement. Along with the customized instruction, it provides students with a technology imbedded education.

A Professional research team, Magnolia Consulting, conducted a case study on the effects of Study Island in various Ohio school districts. This study highlights the gains of three different school districts, each representing a different demographic- rural, urban and suburban. Each school has made significant gains since implementing Study Island. Within this study they compare the percentage of students who met a proficiency level before and after the use of Study Island for one school year. These schools all began using Study Island during the 2006-2007 school year in order to “help students prepare for the Ohio Achievement Test and master grade-level standards and content objectives” (*Case Study Research of* Study Island *in Ohio* p. 5). The image on the right showcases the significant improvement made at Kemp Elementary of Dayton, Ohio with the use of Study Island for one school year.

Implementation

Spring 2010:

* Purchase enough software for the school. To be completed by the Board of Education.
* Confirm computer access in each classroom. Each classroom must be equipped with four computers with Internet access. Updates for the computer lab must be noted, and implemented. This may include upgrading server, computer hard drives, and equipping the lab with at least 30 updated computers.
* Begin training each teacher on Study Island. Training sessions are tentatively scheduled for March. They will be held at Riley after school, during the usual staff meeting time slot (3:45-5:30pm). A representative from the middle school (Denise Young) will be guiding the training, as she has used the program for over eight months now. Denise will be available for a follow-up session mid-August for a refresher before the school year begins.
* Develop lessons and a school-wide Study Island schedule. Each classroom will need a chart to note the computer rotation. Four students are to be on the computer at a time. There will be two rotations that will take place during Intervention each school day. Eight students will rotate through Study Island within each classroom, each day. Develop a curriculum map of topics/lessons to be covered for each grade level. This map should be completed by grade level team for review in August.

Summer 2010:

* Analyze results from 2009-2010 achievement tests. Look for areas of strength and weakness in student scores. Identify areas of focus for lessons and practice in Study Island for the grade levels. Make any adjustments to the Study Island curriculum map designed in the spring. Finalize Study Island rotation schedule for the classroom.
* I will be creating a rotation chart for each classroom. Each student will have his or her name written on an index card. There will be a pocket for each computer in the classroom that will hold the cards. Students will shuffle through the cards, to remind them of their turn during the rotation. The pockets will be fastened to a poster board that will be located near the computer station in each classroom.
* Hold a final training session with Denise. Finalize all implementation plans. Tackle any issues before launch.

Fall 2010:

* Launch Study Island at Riley. Provide parents/students with access codes during fall Open House. Have parent information meeting held in the gym during the open house. Parents will be able to see how the program works (projector hook-up in gym), ask questions, and gain access codes for their student.
* Begin to incorporate Study Island into weekly lessons. Follow curriculum map designated by each grade level team. Utilize rotation chart in each classroom. Have an initial exploration with the class to make them familiar with the program, and instruct them on what they should be doing during their rotation on Study Island.

Summer 2011:

* Analyze 2010-2011 school year achievement test scores. Compare to last years test scores by grade level, and subject area. Chart any growth made as a result of Study Island.

Findings

I have chose to help launch the use of Study Island at my school. In order for this to happen, our first step is to inventory our computers and their efficiency. We have taken the last few weeks to check out each of our computers in the building. This includes the computer lab, and each computer in the classrooms. Our end goal is to have each classroom equipped with four computers. This will allow for teachers to use Study Island in the classroom on a daily basis.

We have found that we have a lot of work to do!! Luckily, to our surprise each classroom has at least four computers in it. This was a huge concern of ours, as we do not have room in the budget to purchase extra computers. So, we are thankful that worked out for us. Also, we potentially have 30 computers in the computer lab. I say potentially, as not all of them are up to par. But, they will need some updating. Many of them are so outdated that they are lacking memory and cannot perform basic functions. We have set up a time for our technology coordinator to work through some of the kinks and see what kind of updates he can perform with the materials we have available. Also, our Internet connection is terrible! It is so slow, and when each computer in the lab is up and running, it is even slower! We need to do some updating as far as that goes as well. We are in the process of setting up a meeting with our superintendent to go over this issue with her. It is our hopes that she will support this project and help us update our server.

As far as my scheduled timeline for this project we are going to have to push things back a bit. This comes as a bit of a disappointment, but it is something we just have to do. We have to get all of our technology issues out in the open and resolved before we can move on to any thing else. If I were to do this again, I would definitely have added in more time for bumps in the road. We are really excited to get things going for the fall, but we have a lot of work left to do, and are already feeling behind schedule.

Although, the one great thing about this project, is the team building we have done. This project has brought our teachers together in a positive way. We are all excited about getting this under way, and look forward to the next step. It has been something that we can all be involved in, and everyone has their own contribution to the project. We have been able to pull in the help of board members and our superintendent. Everyone in Fostoria is excited! We have been in a slump for a while as far as test scores go, and our school rating. This project has been a great morale booster. I am really proud of the efforts shown so far, and look forward to the light at the end of the tunnel.

Implications

This project has been a wonderful learning experience for me and for the other participants. The first change I would make for the future is the timeline. I was rather eager to get things started, and thought it would all fall in to place quickly. I did, but it did not. We are already behind and we are only in the beginning stages. I did not allot extra time for hang-ups, or bumps in the road. Also, I am lucky to have had the support of the board for this project. Without it, many aspects of this project would not be possible. However, it has been very difficult to schedule times where we can all come together. They seem to think that meetings during the day are possible, forgetting we are busy at work in the classroom. Also, the last thing teachers want to do after school is attend a training session on Study Island, and talk about our progress with it. So scheduling has been a challenge.

It is unfortunate that our technology is so outdated here. This has caused such a snag in our progress. If I were to do it all over, I would definitely break this project up into smaller chunks- the first being technology inventory and updates. Only after that is taken care of should we continue progress with the Study Island program implementation.

First and foremost, for any other beginning teachers: Make friends with your building principal, board members and superintendent as soon as possible! Having established relationships with these high-profile members of the district has made this project so much easier for me. Having known me for a while, they are confident in my ability to complete this project, and allow me some leeway to share my ideas and plans for the future. With this, comes pressure to deliver the ideas I have presented, but it has made working on this project at lot easier. I am currently in charge of scheduling our training session, and technology updates within the computer lab with our ITS staff. I will be sitting in on grade level Study Island curriculum mapping, as well as creating rotation charts for each classroom.

Second, technology is so important in education. As education technology masters students, and classroom teachers, we need to educate our parents and community members on the importance of technology upgrades in the district. We had to really reach out and make our voices heard in order to raise funds for a technology update. Many did not realize how behind the times we were until we made it known throughout the community. Keep your community up to date with the school and their needs. This will help with improvements in the future.

Even through all of our ups and downs with this project, we are thrilled with the progress we are making, and look forward to continuing with this venture. We have been using a software-based reading program called Read180 by Scholastic in some of our classrooms. We have had a lot of success with this, and are looking to branch out and utilize it in more classrooms. This will take on the same process as Study Island. We are currently working through the kinks with our technology and computers in the classroom, which will benefit both Study Island and Read180. After we get Study Island up and running, we are going to look into presenting a proposal to the board for funding for purchasing more Read180 licenses. We will have to come prepared and be able to showcase the success our small group of students has shown, and how the rest of our students could benefit from the program- similar to my techquest proposal for this class, except for instead of acting as a guide for the teachers, I will be presenting ideas upfront to Board members. (Thanks to my experience with this project, I will be on the Read180 proposal committee.) We look to have all of our teachers attend a Read180 conference in the summer of 2011. Scholastic holds an annual seminar/professional development for their program users that lasts 4-5 days. It includes training, and individualized breakout sessions that relate to specific program functions that you can use for different grade levels. Hopefully, if all goes according to plan, we can have Read180 up and running the beginning of the 2011-2012 school year.

The professional training will really make the difference with this program. It would have been nice to have it for Study Island as well. Also, by the time we focus on Read180 we will have the majority of our technology snags out of the way. All of the classrooms should have updated computers and the computer lab will be re-vamped as well. This will allow for us to focus on the program and get things rolling without having to worry about the other first. The upgrades have been a lengthy, tedious process, but will be well worth it in the end. I am really happy with the progress we have made so far, and look forward to the end result!

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