

## **Sustainability Technology Project**

### **The learning problem**

My district is located in a community with a wide variety of families. Most families at my high school fall into the middle to upper class but we do have a group of students who are of low socioeconomic status and are considered “at-risk”. This is the group of students that I am most interested in supporting especially since our school has noticed a trend with their low academic achievement. There are many outside factors that contribute to academic standing but there are two learning problems that I think as a school we can work towards supporting. The first is that a majority of our at-risk population does not have someone at home that can help them with their homework and keep them on task. They need extra support to study, to find answers to their questions, and go over new material again by possibly seeing it in another way. We have also found that many of these students do not have a computer in their home that is consistently working, and has an internet connection. This lack of resources creates a learning problem. Many of these high school students do not have a good skill base with word processing and presentation type programs. They also do not know how to properly use the internet to do research because other than school, they do not have access to a computer. These skills are needed for current assignments that develop technical skills meant to help them in their future after high school. Students are given some class time to work on assignments or research and can get help from their teacher, but they are expected to do a majority of the work on their own time. These students need access to computers but more importantly they need extra time and support to learn how to use the internet as a tool and increase their knowledge of computers. The lack of support for this group of students goes against our school’s mission to be a student-centered, caring community with high expectations, successfully preparing students for the future.

### **A technology based solution**

Our at-risk students need additional support academically and need to build computer and research skills. I would like to create a program where these students can stay after school for one hour twice a week and work in the computer lab. At least two adults from the building will stay after school and work with these students. Almost all of the textbook series for the core classes and some electives at our school come with an online component that is a great resource for re-teaching, extra practice, and studying. I plan to utilize these websites by having the students work on the courses they are struggling with to get extra practice and fill in any gaps. This way each student will be focused in on a specific subject and are able to work independently without having to wait for an adult to finish helping another student. These websites will give them the extra support that they cannot always get at home to help them reach their full potential academically. The adults will also work with the students to develop computer and online researching skills to help them create stronger and more thorough papers and projects. These skills will help the students at-risk with current assignments and with possible jobs in their future.

The adults who volunteer to stay after school will be teachers, counselors, or administrators. There is very little training involved for the program since the websites are structured for student use. In addition, most adults in the building already have skills with word processing, presentation programs, and using the internet to perform valid research. The computer lab is located in the media center and the online memberships to the websites have already been purchased by the district so this technology solution would essentially be free.

## **Funding the solution**

Since this program is a free solution the major resource needed is volunteers. My main focus will be to encourage volunteers to sign up. There are more than one hundred adults that will be invited to help out with this program so if everyone volunteers their time for only one hour a semester the program will be more than covered.

## **A path for implementation**

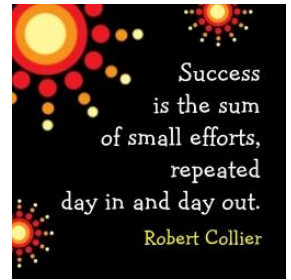
Our at-risk students need additional academic support and need to build computer skills. As previously discussed there is a trend among these students of low academic achievement and this is due to a variety of issues which includes a lack of resources such as support at home and computers. Using the websites allows the each student to focus on a subject and learn a new concept or study for an upcoming assessment depending upon their own personal needs. Learning new skills with computer programs and the internet will improve the quality of their work and how in depth they are able to go with the material. Learning how to use these computer programs will also increase assignment completion.

This solution not only gives these students the academic support they need, but it also give them a time and place to focus in on their learning with immediate support from adults. The program will build their confidence with computers and the internet and several other benefits not necessarily related to academics. Working closely with these students will help adults in the building develop relationships and connect with these students at-risk. These relationships could lead to changes in attendance and behavior which are two issues that we have also found these students also struggle with. I think that if the staff saw the list of students who will be invited to participate they would want to give those students additional support to be more successful and to build a stronger relationship with them. I think finding a way to reach these students would be an incentive for teachers to volunteer their time once or twice a semester to help these students grow closer to their full potential.

To get the program started I will personally speak to some staff members to see if there is enough interest in the program. Then I will get the list of students who are on the free and reduced lunch list and the list of students who live in low income housing from transportation. I have collected this information before without issues. I will take these lists and work with our learning consultant and a couple of counselors to decide who should be added to or removed from the list. These colleagues have the best overall knowledge in our school of students who are at-risk. Once this information is gathered, I will take my plan, the list of students, and the names of a few staff members to administration for their approval. At this point I would send out an e-mail to the entire staff and get the schedule started. I will use Google Docs for the schedule which will allow everyone to see any current changes. I will create a flyer to give to all of the at-risk students explaining the new program. During the program I will have the staff members take attendance at each session and I will post this attendance to our building common drive so teachers can see which students attend the program and when. This attendance list will also help us keep track of which students are coming on a consistent basis so we can look back at their grades and see if there has been improvement. All students' grades can easily be accessed online. Not only will we use this data to assess the success of the program, but I will also send a follow up e-mail or survey to the staff asking for their feedback. I will be looking for feedback from teachers who have worked in the program and from teachers who just have those students in their classroom and have seen a change. I will ask about academic achievements, computer skills, and any other changes in these students that they have noticed. I will also give the students in the program a survey asking what they like, do not like, how the program has helped them, and if there is anything that we should do differently. Success will be if we have at-risk students who are coming on a regular basis and if both the students and staff are seeing positive academic or even social benefits from the program.

Fellow staff members,

First let me say that I am proud to work in a building that is truly student-centered and constantly working towards building a positive learning community! I have learned a tremendous amount from each of you in just the few years that I have been here. Like all of you, I often reflect on my practice the good, the bad, and the ugly. I find that there is a group of students of whom I fall short of giving them all of the support that they need, our at-risk population. These are the students in your classes that are fully capable of learning and retaining the material that you are teaching (as most students are!) but just need a little extra practice or need to be shown a different way of solving a problem. It is not always possible to give these students the support they need in our own classrooms which is why I am looking to create an after school program to help these, as I feel, “bubble” students. They might be getting a D in your class but could be earning a C or B with just a little extra support! They are on the bubble.



#### THE PLAN:

To utilize the textbook websites that we always tell our classes to go on but we know they rarely do! Most students have someone at home who can help them with their homework or a computer to look up information and do their homework on. I am talking about working with our at-risk group that doesn't necessarily have an adult and computer right after school to help them. (See the attached list of students who will be invited to the program). We will open the computer lab to these students for one hour on Tuesdays and one hour on Thursdays. They will use this time to go on the textbook websites to be re-taught a lesson, for extra practice, or to study for an upcoming assessment. They will also use the computers/internet to work on any papers or projects that they have.

This is where YOU come into play! We would need two volunteers on Tuesdays and two volunteers on Thursdays to work with these students in the lab. The textbook websites are all pretty similar to each other and are structured for students so don't worry, you will easily be able to navigate them too! Students will also be working in Microsoft Word and PowerPoint as well as doing research on the internet which I think almost all of us have experience with from earning our degrees and continuing education credits. If you are unsure of how to operate something, ask your partner! That's why there are two of you! Bottom line, no real skills needed just your passion, patience, and time.

If this is something that you are interested in being a part of please open the attached Google Doc and sign up for one hour a week, one hour a month, or one hour a semester. Whatever time you can give will be much appreciated! There are more than 100 of us so I know we can fill that schedule! (coordinate a sign up with a friend?) In fact if everyone volunteers for only one hour a semester, we will have the program more than covered. With that being said, please only sign up if you can absolutely commit to that day. I would hate to cancel on the students because we did not have enough volunteers for a day.

Any questions or ideas feel free to reply!! I know that we are all constantly giving it but as always, thank you for your TIME ☺ It means a lot!! Let's reach out to those who can sometimes seem unreachable and see what happens!

Megan