Purpose:

St. Michael’s Academy was established in 2009, but the building itself is much older and outdated. Systems throughout the school are slow and could use an upgrade. We feel that with advancements in technologies, the school we love should be able to take advantage and utilize newer technologies within the classroom. With the middle school as our main focus, we want to add comfort to the classes and update various systems within this portion of the school. Our plan includes modernizing the air flow system, classroom dynamics, while including an environmentally friendly and an overall aesthetically pleasing learning environment.

Community Use:

Our immediate community will be involved in this project in multiple ways. CCD classes will be able to take place in these brand-new classrooms and they will have access to the computer cart so that they can use technology in their studies. Professional local scientists can utilize our science lab for any experiments they’d like to perform. They can also be a learning advocate for the students to expand their science knowledge. Tutoring can take place in any classroom as well as the printer room, designated for a one-on-one study area. The new Smart Boards make it easier than ever to display presentations for all to see, especially when a meeting is being held. Although these classrooms will be mostly used by the middle school students and teachers, the community around us will always be welcomed to utilize our area.

Green Technologies:

Throughout our renovation process, we have worked to include as many green technologies as possible. With the installation of hydration stations, students will be encouraged to use reusable water bottles which will reduce waste produced by the school. These stations also lower the number of germs spread through the school. Hand sanitizing areas also aid in reducing the spread of germs and illnesses. Motion sensor lights, with energy efficient light bulbs, reduce the use and cost of electricity, as the lights will be on only when needed. Air conditioning and Haiku Fans circulate air and allow for better airflow inside the classrooms. Motion sensored faucets and soap dispensers in the bathrooms help reduce the waste of water and soap. Automatic hand dryers lower the amount of paper towel waste. Finally, the Microsoft Surface Pro 6’s reduces the use of paper by allowing for most work to take place on the laptops.

Adaptations:

One of our main goals was to make adaptations for those who have disabilities or are recovering from an injury or other physical issue. We want all of our students to be successful...
and will make every effort to do so. We have installed two-person tables in almost every classroom to make it easier for people with crutches to sit down and stand up. Wheels on the bottom of these tables and chairs make them easy to be moved around as well. With two students per table, students can interact with each other and ask their peers for help if they are struggling.

Everyone learns in a different way. Some are better when it comes to visual learning while others work best after listening to someone state facts. Still others learn best when they can write all the information down. The Microsoft Surface Pro 6’s allows for all three types of students to learn at their own pace and in their own way. They can take in information visually when watching a video on how to solve a difficult math problem or by viewing a diagram or photo. The Smart Board 7000’s can display information and lessons as well as aid those who learn best visually. Students can also use the audio effect on their Surface Pro’s to listen to an online teaching system or simply by listening to their teacher explain the information with many details and real-world examples. These laptops also make it possible for students to write down or type any information they feel is important with the unique stylus pen. This system of note-taking can assist with the success of multiple types of learners.

**Group Evolution:**

When considering the requirements of this project, we reflected upon the various strengths and talents each individual possessed. Although our group, The Trifecta, consists of only three people, we are a well-rounded group. We each contribute different aspects to this project. We have known each other for many years and have come to respect the work ethic of each person. Although we are not strong in every area individually, when we put our minds together, we can achieve great things. Liam works well with computers and knows a lot about technology. Brenna has a good sense for design, and she is a strong public speaker. Sarah is well organized and works well with numbers. We feel that the strong bond between the three of us will contribute to our success with this project and others in the future.

**Budget**

With $2,000,000 to spend, we have purchased many different pieces of equipment to make a better learning environment which we envision. We have created a budget of $1,998,359.22 to invest in new tables, equipment, and other supplies necessary for a well working classroom. We have created an advanced science lab with a fume hood, an emergency eyewash, sink, Bunsen burners, and all new equipment such as beakers and scales. We bought new tables, desks with storage areas underneath, and mesh chairs to make students more comfortable when working on their daily studies. We have also invested in new appliances such as Haiku Fans, Samsung Air Conditioners, and Hydration Stations and have redone the plumbing and electrical systems throughout middle school. New tiles, paint doors, window shades, and storage areas create a more pleasing environment. We have taken advantage of the newest and most advanced technology and added it to our classrooms in the form of SMART Board
7000’s, Microsoft Surface Pro 6’s and 7 charging stations. Each classroom will hold 30 Surface Pro’s for student use. Google Wi-Fi and a new Netgear Modem create a better Wi-Fi signal throughout middle school. Motion sensor lights, motion sensor sinks and soap dispensers, and automatic hand dryers reduce the electrical cost and wastes produced. Finally, a Samsung TV and Galaxy Tablet display current events, information, and showcase pictures in the hallway for all students to see. We believe that with all our new equipment and additions to St. Michael’s Academy we have created a more modern learning area that teachers, students, parents, and anyone that enters this school will love.