St. Michael's Academy Renovation

By: The Trifecta- Liam Russell, Sarah Szalai, and Brenna Sears



The Middle level here at St. Michael's Academy is the center of our focus and the area we decided to renovate.

We decided that adding more to the classrooms of the oldest students in the school would expand their learning opportunities and make the classroom a more enjoyable and comfortable place to learn, as well as prepare them for high school and their future.



Teacher's design

There is no one that spends more time in the classrooms than the teachers, so we made sure to let them play a part in the decisions to improve their own rooms.

Many of the new materials, furniture, and ideas incorporated were given to us specifically by the teachers.

Budget

Out of the \$2,000,000 we were given, we spent \$1,998,359.22. We spent this money on items such as:

- Microsoft Surface Pro 6
- Smart Board 7000's
- Tables and mesh chairs
- Haiku Fans and Air Conditioning
- A new electrical and plumbing system
- Motion sensored energy efficient lights
- New paint and tiles

We also put this money towards:

- Financial Aid
- Increase in teacher pay
- The next generations of technology
- Future improvements to the school



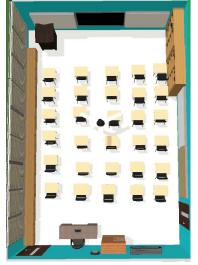
Room 226 - a sixth and seventh grade reading literature classroom.

In a literature class, of course it is based around books and reading, so we installed a full wall of bookshelves to increase storage and let the teacher display all books for students to borrow.

We also added in new desks, with storage compartments underneath, and comfortable

chairs to make learning in the classroom more enjoyable.









Room 227 - sixth and seventh grade grammar classroom.

Room 227

In this classroom we added extra storage space to decrease clutter around the room. We have realized that when a room is busy and cluttered, it is harder to focus and spend time effectively working.

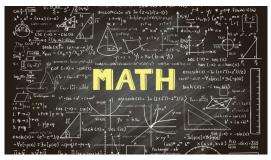
We decided to add tables with built in storage to make it easier for the students to store their materials, and more efficient for group work, as well as a new table for the teacher in the front of the room.

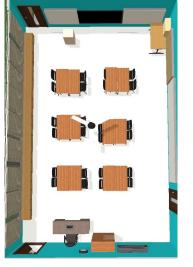


Room 228 - sixth and seventh grade math classroom.

We installed an extra whiteboard to give the math teacher enough space to show her lessons and work to the students.

We also added tables with wheels and storage to decrease clutter, and make it easier to arrange the classroom however works best.





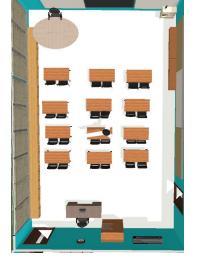


Room 229- sixth and seventh grade history classroom.

The addition of tables is new to this classroom as well as comfortable mesh chairs.

We also purchased a new table for the teacher in the front of the room, and a couple shelves and closets for storage.



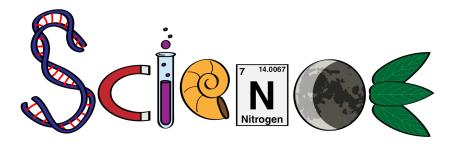


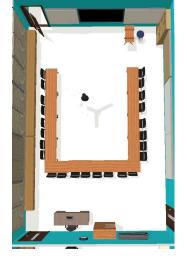




We renovated this classroom by adding several new scientific tools such as bunsen burners, and microscopes, and new equipment such as beakers, scales, and balances.

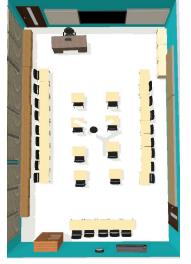
Although this classroom already had tables we added new ones which are nicer and in uniform to the rest of the classrooms.











Room 232 - eighth grade history, religion, and grammar classroom

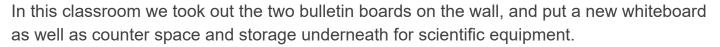
We added an extra storage closet to decrease clutter and make the room neater.

We put desks in this classroom because the desks make it possible to arrange the classroom in the way that many people prefer, and comfortable chairs to make learning in the classroom more enjoyable.

Lastly, we installed a third bulletin board to let the teacher display papers and posters to help students in their lessons.

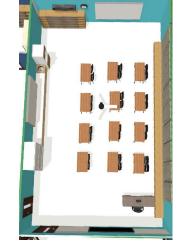


Room 234 - eighth grade math, literature, and science lab



We set up this classroom having the tables facing the side of the room. This is where all the science equipment is, so it is easier for the teacher to demonstrate how to use materials. However, the tables can easily be rearranged to face the Smartboard in the front of the room because they are on wheels.

We also added a large storage closet in the back of the room.





8th Grade Science Lab

The eighth grade science lab is in room 234, the largest room in the middle level.

Here we removed the bulletin boards on the wall and put a new whiteboard, so we could install counters which provide for more storage and an extra workspace.

We also installed fume hoods, a sink, and an eyewash.

All new equipment and materials such as microscopes, bunsen burners, scales, and beakers were added as well.

Overall Improvements

There are some renovations that were not specific to a certain classroom, and are spread throughout the middle school. These include:

- New window shades
- Air conditioning
- Haiku Fans
- New tables and mesh chairs
- A new, more modern copy machine
- New teachers desks and chairs
- Elkay hydration stations
- Smartboard 7000's

Microsoft Surface Pro



We updated the current Dell laptops the eighth grade has to the Microsoft Surface Pro 6, and bought enough for every student in 6th, 7th, and 8th grade. The Microsoft Surface Pro:

- Has a battery life of up to nine hours.
- Is a 2-in-1 laptop/tablet.
- Very slim and travel-friendly.

The Surface Pro allows students to learn and study effectively, work on projects and class work, and be creative in their studies.



Tables and chairs

The addition of tables is new for a majority of the classrooms, and we decided to add them because:

- The built in storage is an easier, safer, and neater way for students to store their materials
- The tables have wheels making them easy to move around and allow the teachers to arrange the classroom however they find best as well as set up for group work

The new mesh chairs will be much more comfortable for the students and because they are on wheels, it is easier for people to get in and out of the table, especially if someone had an injury or crutches.





The Haiku Fan is an energy efficient, specially designed fan for homes, classrooms, and commercial buildings. The Haiku Fan is:

- Energy efficient exceeding the ENERGY STAR requirements for ceiling fans
- Can make a room up to 10 degrees cooler
- Completely silent which will make for a better learning environment
- Automatic, and will speed up, slow down, and turn on or off on its own





The use of Samsung wall-mounted air conditioning will cool down the building in the hot summer months of the school year.

In the past when the rooms were only being cooled by a fan or two, it would make for a very hot, uncomfortable day in the scorching heat. Now, though with the use of the Samsung air conditioning and Haiku fans, the rooms will be cooled down and comfortable for everyone in it.

Hydration Stations

We installed the Elkay Hydration Stations because it:

- Provides cleaner, healthier water within everyone's reach
- Reduces waste and encourages use of reusable water bottles
- The sensor-activated bottle filler is designed for easy, hands-free use
- Certain plastic components have a special silver ion antimicrobial protection that prevents the growth of mold and mildew



Shades, paint, and tiles

To give every room and hallway a newer, fresher look, we gave everything a new paint job and new flooring tiles.

The current shades in the classrooms do not block out the sun as best as they should, so we installed new window shades. These shades will:

- Make the classroom more comfortable and cooler in the hot summer months, by blocking out the sun
- Prevent the glare the sun causes onto the Smartboard making it easier to read and watch different things from the screen

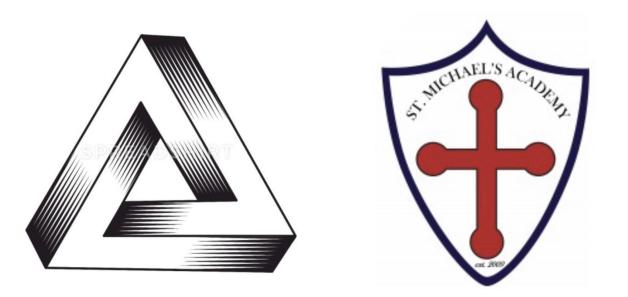
Purpose, adaptations, and community use

The purpose of this project was to improve the learning experience in and out of the classroom, and to prepare the middle school students for high school and beyond.

Certain components of each classroom can be changed to fit each students personal needs. For example, for students who learn best visually, teachers will be able to demonstrate certain things, as well as learning from watching videos or seeing pictures or drawings.

The community can benefit from these renovations in multiple ways but mainly from the Church CCD classes, and tutoring sessions.





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