Art students used their talents to recently create paintings that will be displayed in the Sisters of Notre Dame de Namur’s Photovoltaic Learning Lab.

CJ STEMM students have been connected to the Photovoltaic Learning Lab since its inception in the winter of 2013. The lab was installed at the Sisters of Notre Dame de Namur’s Cincinnati campus in the winter of 2015.

"Once the equipment was installed and operating in the lab, which is a single bay of a brick garage on the Sisters’ property, we began to brainstorm about ways to expand the learning space into representing something more than just the technical photovoltaic system," CJ STEMM coordinator Meg Draeger explained. "I began thinking about a STEAM Art component to enhance the space, which is rather stark and bare, with a large blank white wall that divides the garage bay from the rest of the garage. I spoke with Kaye Carlile, CJ art teacher, about possibly creating a large painting or mural to fill that space. I applied for an Innovative Teaching Grant of the Miami Valley Catholic Schools in September 2016, and received one, which would cover the materials’ expense to create murals.

"By late fall 2016, after I received word that I was awarded the grant, I shared that news with the Learning Lab project team, and Mount Notre Dame High School expressed an interest in playing a larger role in the art project," Draeger continued. "We took a step backwards, conducted meetings and worked to generate a larger scope for the project. The murals that Kaye’s students would create became six to eight paintings that could serve as part of a portable traveling display about the PV Project and Learning Lab, or be displayed in the Lab. We were connected to the MNDHS art teacher, Michele Brauer, and this summer will finalize a plan for the entire space - aesthetically and academically, to create artwork in various media for the space, and learning activities to be done by visiting students of all ages, K-12, in the lab as part of a traveling exhibit and presentation about the project."

"I think that it’s great when my art students can become involved in a project that has such a huge global impact as the clean water project," Carlile shared. "It’s a challenging endeavor to step into the mode of creating specific imagery for a specific purpose. In this case, it was creating images that reflected the culture of one of the areas in the Democratic Republic of Congo, a region where one of the photovoltaic projects has been installed."

Chloe Brzozowski ’19 and Natalie Davis ’18 were two of the art students asked to help with this project.

"I painted an African woman cleaning clothes by a river," said Davis. "I was given the option of this picture and I chose it because of the colors and I thought that it would be a good challenge."

"I painted a photo of a church," Brzozowski said. "I added a tree in the background to add more interest and depth to the painting."

The students said the opportunity to have their paintings displayed in the Learning Lab showcases the great partnership between CJ and the SNDdeN.
"I think it is a very unconventional way to get different types of people together, bonding through our faith, and hope for the lives of those in need," Brozozowski reflected.

Davis added, "I loved this project because it allowed me to focus more on the bigger things rather than all of the small details. I feel important because the SNDdeN are such a great society and I am honored to have my artwork on display."

"It very much excites me when different projects that start out independently merge and relate to each other," Draeger shared. "Those connections occur all over in the world, in our daily lives; one person, or event, or place, relates to many others, and it's part of our life's adventure to discover those connections, to encourage students to seek those connections and learn about them."

The paintings will be taken to the SNDdeN campus this summer before being used as a traveling display.

Natalie Davis '18

1. I am painting an African women cleaning clothes by a river. I was given the option of this picture and I chose it because of the colors and I thought that it would be a good challenge for me before my senior year.
2. I feel important because the SNDdeN are such a great society and I am honored to have my artwork on display
3. I believe that this is a good partnership because it challenges young artists like me to work on a bigger canvas and have a chance to display our art.
4. I loved this project because it allowed me to focus more on the bigger things rather than all of the small details. I also thought that I could not pull off this painting but I proved myself wrong and this will be a good piece to put in my AP portfolio for senior year.

Chloe Brzozowski '19

1.) I am painting a photo of a church in ( ), I added a tree in the background to add more interest and depth to the painting.
2.) I am very excited that lots of people will be able to look and relate to my painting. I am also happy to be fusing my love for art with my faith.
3.) I think it is a very unconventional way to get different types of people together, bonding through our faith, and hope for the lives of those in need.
Kaye Carlile

I think that it's great when my art students can become involved in a project that has such a huge global impact as the clean water project. It's a challenging endeavor to step into the mode of creating specific imagery for a specific purpose. In this case, it was creating images that reflected the culture and local of one of the areas in the Democratic Republic of Congo, a region where one of the projects has been installed. This project also gave the students an opportunity to do something they had not done before, which was working on a very large scale; a feat in which they succeeded. They created six wonderful, colorful 4' x 4', They will also serve as a portable display for educational and presentation purposes.

Meg Draeger

1. CJ STEMM has been involved in the development of the SND Photovoltaic Learning Lab located on the Columbia Ave. campus since its inception in December 2013/January 2014. The Sisters, led by volunteer ("SND Associate"?) Keith Hanley and project engineer Lou Casey, identified an opportunity to engage SND high school students (CJ and MNDHS) in a learning project, and one that would benefit the overall project by providing a small scale replica of the African installations on which to experiment and test improvements.

From the start, it was to be a collaborative project with, and for, the students of MNDHS and CJ.

Significant planning of the details of the project took place at SND in May 2015, with Lou visiting the US.

Installation of the lab took place November/December 2015, into January 2016.
January 2016, CJ students traveled to the Lab (you did a story then about the students having lunch and visiting with Sisters who'd been in Africa...)

February 2016, Lou Casey was in the US (he lives in England), at the SND. We had CJ students go down and meet him then, too - I think just the capstone team and some engineering students, and Eric Grimm.

Once the equipment was installed and operating in the lab, which is a single bay of a brick garage on the Sisters' property, we began to brainstorm about ways to expand the learning space into represent something more than just the technical photovoltaic system. I began thinking about a "STEAM" Art component to enhance the space, which is rather stark and bare, with a large blank white wall that divides the garage bay from the rest of the garage.and spoke with Kaye Carlile, about possibly creating a large painting or mural to fill that space. I applied for an Innovative Teaching Grant of the Miami Valley Catholic Schools in September 2016, and received one, which would cover the materials expense to create murals.

By late fall 2016, after I received word that I was awarded the grant, I shared that news with the Learning Lab project team, and MNDHS expressed an interest in playing a larger role in the art project. We took a step backwards, and conducted meetings and worked to generate a larger scope for the project, and the "murals" that Kaye's students would create this spring became 6-8 paintings that could serve as part of a portable traveling display about the PV Project and Learning Lab, or be displayed in the Lab. We were connected to the MNDHS art teacher, Michele Brauer, and this summer will finalize a plan for the entire space - aesthetically and academically, to create artwork in various media for the space, and learning activities to be done by visiting students of all ages K-12 in the lab, and as part of a traveling exhibit and presentation about the Project.

In January 2016 I gave an introductory and background presentation about the SND PV Project to Kaye's art class (period 8), and her students got started sketching and painting later in the spring.
Angie Weisgerber from the SND provided photos of African communities where the PV systems are installed, and Kaye and her students selected some to use as images of their paintings.
I am also selecting 6 additional photos fro the collection to have Gina print at CJ (on the large color printer) and mount on foam core board, to include as part of the traveling exhibit, to tell a bit more of the story of the Project.

3) I (and our entire project team, really) see the SND PV Learning Lab as an excellent forum in which to incorporate STEMM, Art, religion, and even social studies/cultural subjects. We want the Lab to be used to tell the story, visually, technically, and by the people involved in the project, of the Sisters' ministry, and how one engineer (Lou) has truly made engineering his vocation and ministry, to serve the Sisters, and African people.
It is definitely still a work in progress, and I'm anxious to see the outcomes, the first being the paintings that Kay'e students are competing next week!

4) When the paintings are completed, they will, I believe, initially be taken to the SND campus, shared with all the Sisters, displayed (and stored) in the Lab. I'd like to bring them back to CJ, with the additional photos I'm working on, and use those, in conjunction with a PowerPoint presentation that our project team created previously, to share the Project story with the CJ community - perhaps even an evening program for parents and the greater CJ community, to explain the connections among the Project, the Learning Lab, the SND African communities, our annual Lenten Mission Drive for the Clean Water Project, the timeline of the Sisters involvement with education, and more!

It very much excites me when different projects that start out independently merge and relate to each other. Those connections occur all over in the world, in our daily lives; one person, or event, or place, relates to many others, and it's part of our life's adventure to discover those connections! And to encourage students to seek those connections and learn about them.