

## Construction begins on MCC's Dream Lab, to include collaborative stations, and interactive learning theater, 3D printer; modeled after FIT's Digital Scholarship Lab

By Ken Datzman

About five years ago, Melbourne Central Catholic developed a master plan for its roughly 40-acre campus, bringing together a committee of faculty, staff, alumni, and business leaders to strategize the private school's future direction in terms of facility enhancement.

The development of the master plan also kicked off MCC's "Build-to-Serve" capital campaign, which successfully raised \$3.3 million for a two-phase construction project spread over several years.

The first phase of the upgrading included an athletic field house, a dining and activities center, gymnasium renovations, and a new MCC Commons building at the main campus entrance that houses administrative and student services.

Now, MCC is rounding out phase one with the construction of a new 5,500-square-foot "Dream Laboratory," where students will hone valuable skills that will help carry them to the next level in their lives.

The Dream Lab will be similar in size to the other two buildings recently constructed on campus.

Michael Burke, MCC president, said the Build-to-Serve initiative is designed to enhance the quality of learning for students, as opposed to constructing new facilities to grow the school's enrollment.

"The whole purpose of the building campaign was never to grow the campus where we could enroll more students," he said.

"We are very happy being at capacity (550 students). We're comfortable with that number. All of the new buildings and upgrades are designed to enhance the learning experience for the students. And that's what the buildings coming in the future will be about, too. We're creating a better high school learning experience for the students."

Construction just started on the Dream Lab. Area firm Certified General Contractors Inc. is building the Dream Lab. The construction is expected to be completed this fall. American Business Interiors is working the Dream Lab project, too. Both companies have done

multiple projects on the MCC campus.

The flexible space of the Dream Lab will feature areas for independent experiments and collaboration. The latest technology, design tools, and software will complement every academic area, personalizing the learning experience for each student, said Burke.

"The Dream Lab, which will center on project-based learning, will be a huge curriculum enhancer for MCC," said Burke, who has led the transformation of the private institution since being named president in July 2010.

MCC students will be able to "design, collaborate, explore, create and imagine" various types of projects in a hands-on learning environment.

"It will provide students with the types of experiences and skills they will need out in the real world. We've made a big commitment to students getting as much hands-on experience as they possibly can while at MCC."

The Dream Lab will have collaborative work stations, an interactive learning theater, a video studio, a broadcast studio, a robotics laboratory, "tinker-tech space," 3D printing capabilities, a design zone, a cybersecurity room, and a wide range of tools for the students to use on their projects.

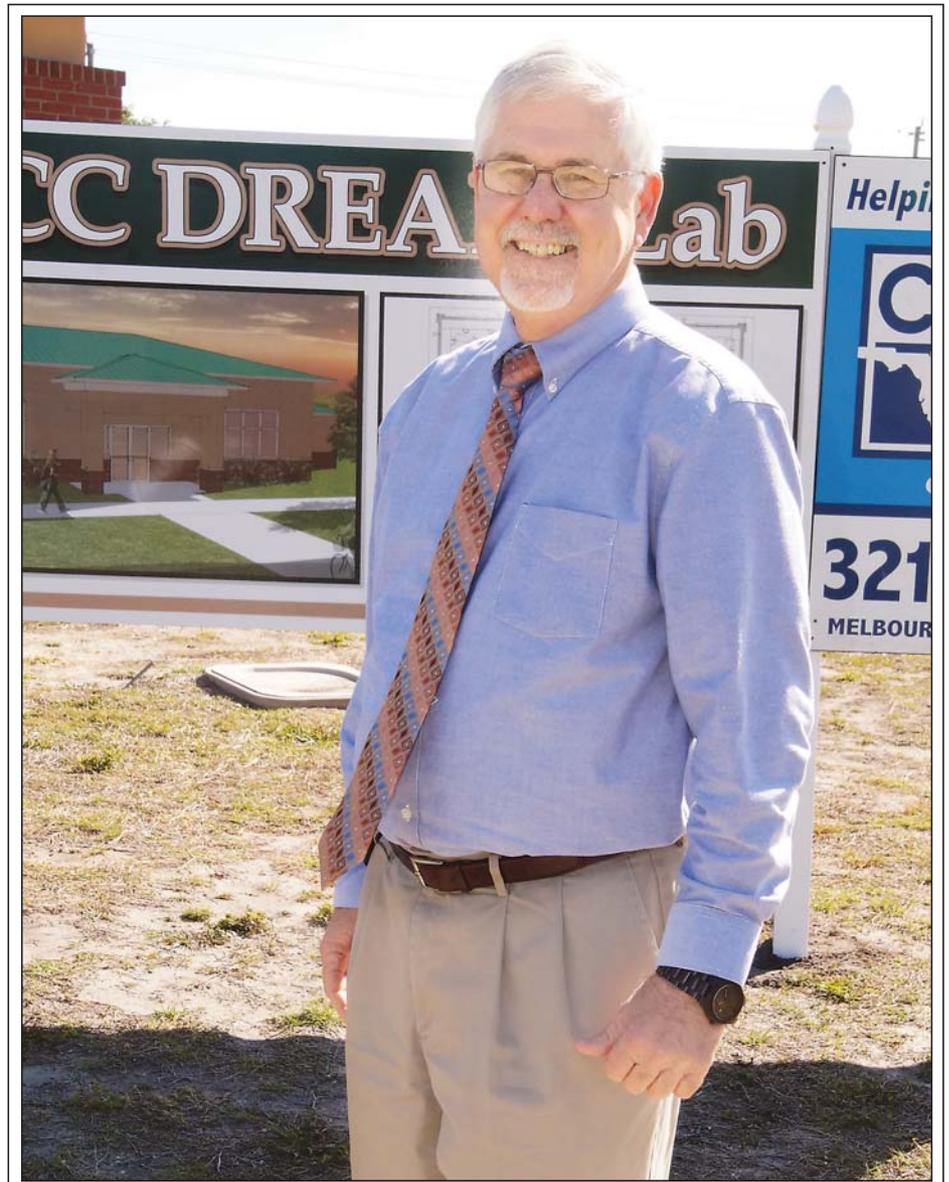
Burke said the facility is modeled after Florida Institute of Technology's leading-edge Digital Scholarship Laboratory.

FIT's Digital Scholarship Laboratory is a facility within the Evans Library that allows researchers to access, integrate, and share current and future information across all disciplines using digital tools and resources, such as Data Curation, Digitization, Special Analysis, and Visualization, for example. In general, the DSL supports research, teaching, and learning in all FIT disciplines.

MCC students will be working in a college-like environment at the Dream Lab.

"We're really excited because this is going to be a state-of-the-art facility. Anytime we can model what FIT is doing, we feel like we are on the cutting edge of education," said Burke.

He added, "Martin Gallagher at FIT has been very helpful in guiding us through this whole process. He's shown us the devices and the technologies their



BBN photo — Adrienne B. Roth

Michael Burke is president of Melbourne Central Catholic. The school is building a new Dream Lab that will feature the latest technology, design tools, and software that will complement every academic area, personalizing the learning experience for each student. The facility will contain collaborative stations, an interactive learning theater, a video studio, a broadcast studio, a robotics lab, a 3D printer, tinker-tech space, and a design zone. The facility is expected to be completed this fall.

students use most at the Digital Scholarship Lab. He's been really great at letting us experiment with different things. A lot of what we're adopting for the Dream Lab came from his recommendations. It's really nice to have a partner like FIT."

Gallagher is the Digital Scholarship Lab support manager.

The Dream Lab will give MCC students the opportunity to gain hands-on experience in one of the fastest-growing areas of technology, 3D printing.

Please see Melbourne Central Catholic, page 19

## Melbourne Central Catholic

Continued from page 12

"I think they are going to be really excited to use 3D printer technology. It is reshaping a lot of processes across many industries and is only going to gain more prominence in the years ahead, I believe," said Burke.

As a technology, three-dimensional printing has been lauded for its ability to give small-scale manufacturers the opportunity to create prototypes of new products quickly and cheaply, especially when compared to older manufacturing processes.

This kind of printing is reshaping the landscape of all types of businesses, including medicine.

Once considered a futuristic technology on the distant horizon, 3D printing of medical devices and other things is quickly becoming a promising reality, according to a report by the Food and Drug Administration.

Patients have already benefitted from 3D printed medical products through access to personalized devices and innovative drugs that have led to significant health improvements, says the FDA.

"The Dream Lab is all about being

creative and thinking 'outside the box' when working on projects together with classmates," said Burke.

"Students will have to brainstorm to figure out how to go about doing a project, and then actually begin working on it. When it's finished, they will present the results of their project. So, it will take them from the thinking process part to the implementation part to the selling (convincing) part. And these are valuable skills to learn at each step. The process will help teach them to be problem-solvers and to be critical thinkers."

The Dream Lab is basically a STEM facility. STEM stands for a learning approach that uses the disciplines of science, technology, engineering and mathematics. Burke said the Dream Lab will be updated as STEM procedures and processes advance in the future. The facility is designed to accommodate change.

"We'll work to keep the facility up on the latest trends. Over time, some things will phase out and new things will phase in because technology will continue to evolve and the educational learning environment will evolve with it."

MCC students will be able to use the Dream Lab beyond typical school hours. The facility will remain open until 8:30 at night, said Burke.

"We have students attending MCC from all over Brevard County, which is 72 miles long. If students are assigned a group project, and some kids live in North Brevard and others in South Brevard, they might have a hard time getting together to do their work. The Dream Lab gives them a place where they can stay after normal school hours, work on their project and get it done."

Burke said MCC students are "excited about the Dream Lab concept. And they will really be excited once they start physically working in it."

He continued, "Once we open the Dream Lab and start using it, the other thing that is going to happen, in my expectation, is it will make the teachers more creative because they will have all of these tools available to them. Both the teachers and the students will be exploring a lot of learning possibilities."

There are some naming opportunities on the inside of the building for individual classrooms, for individual makerspace

rooms and for other areas. "And the facility itself has not yet been named," said Burke.

There are five naming opportunities available for the Dream Lab. Businesses and individuals can invest in MCC by selecting one of the naming opportunities for the building. They are: Building Naming Rights, \$500,000; Interactive Learning Theater, \$20,000; Makerspace Labs (six) \$15,000; Office, \$10,000; and Collaboration Station, \$5,000. To inquire about these naming opportunities, call the school at 728-4002.

Two years ago, Burke was selected as one of only two Catholic school presidents in America to be recognized with top honors from the National Catholic Educational Association. There are more than 1,200 Catholic schools in the nation.

He was honored during NCEA's 2016 Convention & Expo held in San Diego, Calif., the largest annual private education association gathering in the country.

Under his leadership, MCC has developed a number of new initiatives and programs. "We are very happy with the direction we're moving and excited about MCC's future," said Burke.

Earn a great rate without tying up your money.

## Premium SAVINGS

This account offers higher dividends on balances of \$25,000 and higher.

Available for Personal and Business Accounts.

Get Liquid

Flow some funds to the Premium Savings Account today.

[ccuFlorida.org/getliquid](http://ccuFlorida.org/getliquid)

Community  
credit union  
FLORIDA

A one-time membership of \$5 required. Membership available to Brevard, Indian River, Orange, Osceola, Polk and Volusia Counties. Federally insured by NCUA.

KEVIN R. HILL

321.308.2270

#1 RE/MAX Agent in Brevard.  
Over \$36 million in closed sales in 2016.  
Selling Brevard County since 1983.  
Specializing in corporate relocation  
and waterfront property.

Call me **TODAY!**  
Everything I touch  
turns to **SOLD!**

RE/MAX Alternative Realty  
[www.kevinrhill.com](http://www.kevinrhill.com)

