

## Generosity Helps Cultivate The Makers Our World Needs Now

In the fall of 2016, MPA received a very generous gift of \$500,000 to build a Makerspace on campus. When it opens in August, it will be a hands-on, creative center for the community (at MPA and beyond) to gather, share, create, innovate, and, most importantly, inspire each other as they engage deeply in the STEAM disciplines both during and outside of school hours.

"We know that the best education occurs when critical thinking and deep content knowledge are used as the base for growing flexible and essential skills in problem solving, perseverance, and creativity. The Makerspace follows and encapsulates a trajectory at MPA that includes the iLab, Digital Fabrication Studio, and Robotics Lab and encourages our students to innovate in big and small ways," said Dr. Bill Hudson, head of school.

In addition to advancing MPA's success in the STEAM disciplines, the Makerspace will advance character development as students take risks, develop skills in perseverance, and iterate from perceived failures to achieve success. "Through it, character-building traits collectively known as grit, including creativity, curiosity, open-mindedness, persistence, social responsibility, and teamwork will be nurtured," said Hudson.

An advisory committee composed of students, teachers, administrators, parents, and outside experts has been meeting regularly and working closely with the selected architect and builder. Demolition of the space has begun and construction will be complete before the start of the 2017–18 school year.

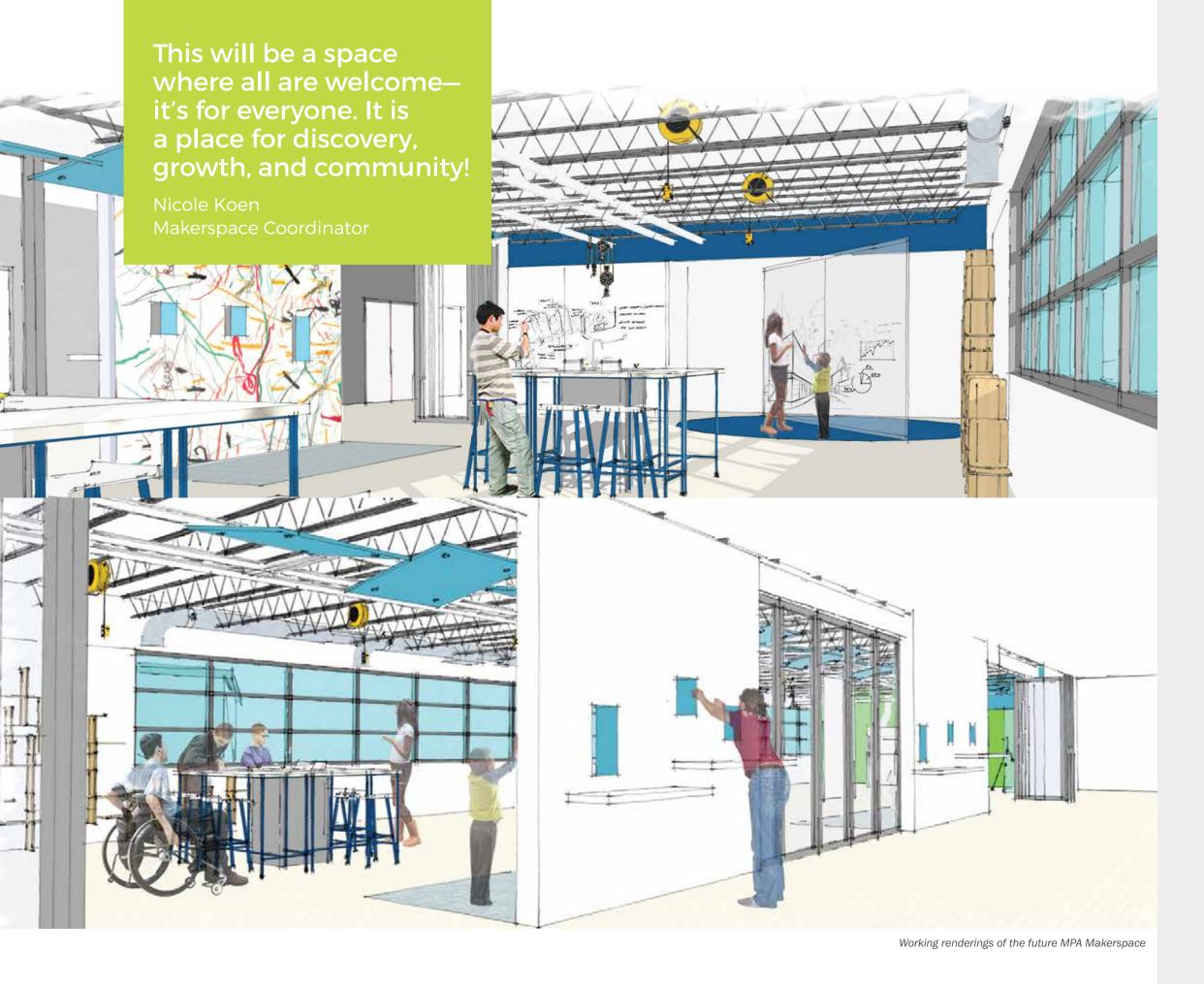
In addition to helping guide the construction process, the committee developed a comprehensive pedagogy. The educational program will flow from that, with leadership from Nicole Koen, who will soon transition from academic technology coordinator to the newly created Makerspace

coordinator role. The Makerspace will serve as a resource room used by all different classes, across each division, and in different contexts. MPA's culture of making and innovation will expand and be embedded across all curricular areas.

"In the 2300 square feet space, students will progress through two zones to make their dreams become a reality. They will start in the collaborative zone where they will find movable, flexible furniture, collaboration tools, and soft materials used for prototyping like cardboard, clay, string, etc. Then they will progress to the other zone where they will find equipment such as 3D printers and scanners, laser cutters, sewing machines, vinyl cutters, power tools, and more," said Koen.

Teachers PreK-12 are excited to use the space and will self-select for professional development over the summer months. They will co-teach in the Makerspace with support from Koen, using both design thinking and project-based learning. Scaffolding these two methods of instruction will help create an environment for creative problem solving and an avenue for innovation.

"This gift is a shining example of how philanthropic support allows MPA to exceed expectations and above all else, foster the gifts, talents, and mindsets that are already within our students. I am so very grateful," said Hudson.



## For Dreamers And Doers

## WHAT IS A MAKERSPACE?

- A collaborative learning space where the community can gather, share, create, innovate, and inspire each other.
- A place where students can creatively pursue their own learning, both on their own or with others, through experiential, interdisciplinary learning driven by interest and inquiry.
- An incubator for innovation where questions are valued above answers, students learn by doing, and the final product is determined and assessed by the individual.

## WHY A MAKERSPACE?

- Present students with opportunities to follow their own intrinsic path to discovery.
- Enable, motivate, inspire, and empower students to take control of their own learning.
- Connect liberal arts thinking with 21st century skills and competencies through practical, handson, interdisciplinary, problem-based projects.
- Place the right tools and materials in the hands of students so they can develop the literacies to remake our world into a more democratic, equitable, and humane place.
- Actively encourage students to pursue their passion, learn more deeply, and connect to the subject matter in new and creative ways and develop new skills that can be brought to the classroom.
- Strengthen the MPA mindset and culture of creativity, collaboration, trust, resiliency, and problem solving in our community.