March 8, 2021

Ralph Stair Prize in Innovative Education Committee Office of Faculty Development and Advancement 115 B Westcott Florida State University Tallahassee, FL 32306-1481

Provost McRorie and Committee Members:

It is with great excitement I submit this statement to accompany my nomination for the Ralph Stair Prize in Innovative Education Award at Florida State University. Dr. Jill Pable, chair of the Department of Interior Architecture and Design, has been an inspiring leader and colleague who has offered support for my mission in creating and growing the Studio D collection of labs at FSU for experiential learning, and I grateful for her nomination to this awards committee. The Interior Architecture and Design program at FSU is ranked nationally in the top 20 schools for undergraduates and the top 10 for graduate degrees. My role in the department for the past 10 years has focused on founding, developing, maintaining, and growing the now 7,000 sq. ft. collection of spaces that Studio D: Design and Fabrication Labs house at the Carnaghi Arts Building. This includes the Studio D Workshop (est.2012), Studio 3D Lab (est.2017), the Materials and Objects Testing Lab (est.2019), and open student workspaces. The mission of Studio D is to provide undergraduate and graduate students opportunities for interactive and experiential learning through repeated testing (and failing) of prototypes, materials, software, and fabrication machines. The spaces at Studio D and process-driven interactive pedagogies that I employ have grown over the past decade into a place for student engagement truly unique from other design programs. Although we have been successful on two design patents, Studio D's main objective focuses on the process of making over the product produced. Studio D and the students I teach have also partnered over the years with other departments and FSU offices for shared knowledge, equipment use, or simply for an installation of work from Studio D. These include: Technical Theater, Facility for Arts Research, Costume Design, Department of Art, Office of Commercialization, College of Business, and the Innovation Hub.

As a design educator, I have always understood that teaching furniture or product design and fabrication to interior design students would not yield students who focus solely on making furniture or products. The job placement rate of our department is 96% within 6 months of graduation within the design field, however most of these jobs are junior interior design roles in architectural firms. Studio D is a unique makerspace for students that focuses on the synergy of the design and fabrication or "making" process, to enrich student understanding of how things are built. It is inherent that design students understand the complexities of product development and fabrication so their understanding and appreciation for making is something that helps them become better designers. My hope is students take this experience with them into the profession of design and use

their knowledge of making to better communicate with those that can realize and physically produce their design visions.

I began teaching undergraduate furniture design in 2010 as a lecture class in a formal classroom. I facilitated the "making" aspects of the course with two sawhorses and an inexpensive jig saw in my front yard and scheduled student material drop off times for preparation. During these "lean" years, students developed full-scale useable cardboard chairs inspired by children's literature that were then donated with the accompanying books to local pre and elementary schools. These were great times and we produced over 200 literary cardboard chairs for local schools. The focus on involving students in our community through specific product development for children was a rewarding project for all involved. However, having no work areas in the formal classroom was an immediate challenge and I began to look for space to branch out. I also began to see a trend of student sketches and designs being quite creative when drawn in 2D but failing to make the impact hoped for when the student tried to make the piece. I realized these students were great designers, but terrible makers. In 2011, Studio D began to emerge with a grant for the first of its digital fabrication machine, the laser cutter. This was a game changer for students to have a machine create the pieces for their designs that they could draw with CAD software. Creativity soared in the deign process and final products and I looked for more machines and areas for potential growth and enhanced student learning and development. In 2012, the opportunity arose to move the furniture design classes to the newly leased Carnaghi Arts Building. This space provided the foundation for Studio D and its collection of experimental design labs that has since grown into four distinct spaces all focused on hands-on active learning. The physical equipment I have acquired over the past decade at Studio D includes a full traditional workshop of tools; along with newer digital fabrication equipment of a 4'x4' Shopbot CNC router, 24"x18" and 40"x28" Epilog laser printers, and 10 Robo 3D printers for student use.

It goes without saying that recent events and sudden changes to campus access have had large-scale impacts on teaching, learning, and the use of physical learning environments. This is especially true of experiential learning spaces, such as Studio D, that practice and rely on in-person demonstrations and interactions. Rethinking the use and pedagogical approach of "hands-on" has been put on the fast track for me recently, and in order to maintain the investment in this physical and equipmentrich environment, navigating the transition to a hybrid approach became more critical than ever. The shift in the makerspace's physical use and it's newly found remote relationship to the virtual studio at Studio D eveloved over the past year. During the spring of 2020, the makerspaces st Studio D found themselves in a limbo state with no activity of any kind for six-weeks. The use of software and technology to accomplish the final course goals was reactionary and strictly facilitated the virtual studio's minimum levels of success. The immediate needs that arose in spring prompted the development of a pilot study during the summer of 2020. The pilot study successfully connected four design professional in different locations in the virtual studio and with the remote makerspace in real-time for process and product development. The lessons learned from these experiences formed the fall 2020 hybrid approach for graduate students, which successfully navigated in-person and remote studio and makerspace activity depending on the current day or student needs. Machines students were using were available through webcams in real-time and students could view their production from anywhere. Logistics included remote file sharing, on-screen critiques, production files checks, machining toolpath setups, animations of production, and final prototype production. The results from the past year show that students can involve themselves in all studio and makerspace occurrences at Studio D in real-time regardless of their in-person or remote class status.

This opens up possibilities for the future of expanding the reach of Studio D and the idea of remote making beyond the physical space.

The successes of managing the relationship of the virtual studio and the remote makerspace have led to some exciting developments and future plans for Studio D. There is a field-wide gap Studio D is uniquely positioned to fill as there are currently no opportunities for general design residencies within the field. Studio D is working to make FSU a unique leader in this field by using the makerspace for a summer institute in 2021 to bring together design professionals and academics in a creative "virtual" residency program. The design field sees limited collaboration opportunities between academia and the profession to learn together, and further the design field relies on experiential learning and interaction and this is limited now more than ever. The virtual Studio D platform (video conferencing) allows collaboration to the remote Studio D makerspace for ideation and testing. "You can be anywhere, but I can still help you create and produce your works in Studio D". The pandemic has challenged design professionals and academics, who are used to hands-on learning, teaching, and professional work. This will meet the challenge through creative use of remote and hybrid-in-person spaces to accomplish design goals. I now must reinterpret what we do and how we do it under these new circumstances; viewing it as an opportunity, this will also uniquely position FSU Interior Architecture and Design so that when we return to F2F we will have established this program which will allow participation by people far away, such as national and international design centers (Chicago, Milan, Paris, the Getty, etc). My goal is to help fill this void for academics and professionals in the design field during the summer months by providing access to not only the machines, software, and materials for making, but the expertise I have developed over the past decade of teaching making within the Studio D labs.

Makerspaces and the experiential pedagogies they support present a unique opportunity in the era of authentic and meaningful distance learning. I have a long-term plan for the Studio D Institute that will lead in the field, by providing design faculty and professionals opportunities to collaborate in real-time with each other and machines remotely at the Studio D makerspace. The Studio D Institute will connect FSU's design community to the wider world of design professionals and make FSU an experimental center for "virtual residencies" and "anytime/anywhere" product development and fabrication. I thank you for your consideration for this award and invite all to visit Studio D in person or remotely anytime.

Thank you,

Marlo Ransdell PhD, IDEC

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