• **Paper / Proposal Title:**
Revitalizing Architectural Studio Culture in a Digital Learning Era

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• **Abstract (300 words):**
In the age of digital education, conventions and methods of education are re-designed, with students and instructors alike adjusting to new pedagogical paradigms. The physical closure of post-secondary institutions worldwide has initiated a frantic rush to develop innovative curricula, assessment processes, and delivery methods that adapt to the loss of the conventional classroom. While not entirely novel, the integration of pre-recorded videos, videoconferencing, and online assessment have become hallmarks of the "new normal". Within architectural pedagogy, design studio is the point of convergence beyond course material applied to a design; it is a microcosm of architectural praxis. Studio not only is the physical location for students to develop their design work and socialize, but it also serves the dominant course in the curriculum that mirrors industry where students are able to receive critical feedback from professor and peers on ongoing projects. Studio courses serve as the platform where architecture students develop the majority of their design knowledge, ranging from creative expression to technical construction expertise. Unfortunately, challenges arise for architecture programs when access to physical studio spaces is eliminated or restricted, as witnessed with the COVID-19 pandemic. With such a context, conventional studio activities, such as model making, design discourse, presentations, and even interpersonal dynamics are compromised if not eliminated.
This paper presents key strategies in maintaining studio culture within architectural education in both academic and extracurricular settings. Drawing upon examples from Canada’s largest architecture program, the paper outlines the tools and methods integrated within the new digital learning environment that maintain and improve student performance in a virtual setting.

• **Author(s) Biography (200 words each):**
  
  Vincent Hui holds several degrees including a Masters of Architecture (Waterloo) and Masters of Business Administration (Schulich at York). As a faculty member in Ryerson’s Department of Architectural Science, he teaches a variety of courses, from design studios to advanced architectural computing and digital fabrication. He has been awarded several teaching distinctions across different universities, including the 2015 Ontario Confederation of University Faculty Associations’ Teaching Award and most recently, Ryerson University’s 2018 President’s Award for Teaching Excellence. He has cultivated an extensive record of publications and research on design pedagogy, advanced simulation and rapid prototyping, and technological convergence in design praxis. A proponent of increasing connections to industry and the greater community, he has developed the Architectural Science Co-op program as well as multiple summer programs for aspiring young designers. He currently serves as a co-director of Ryerson University’s Design Fabrication Zone where he has mentored several award-winning projects and innovative startups.

  Tatiana Estrina is a Research Assistant at Ryerson University in Toronto. She has had her design work displays in several exhibits including the 2019 Icebreakers Festival, 2018 Grow Op Exhibition and the Whitchurch-Stouffville Museum. She has been able to win various honors, most notably three placements in the ACSA Design Competitions, the Award of Merit in the CISC Design competition as well as several academic awards. Her exhibitions have also won awards including Ontario Museum Association Award of Excellence in Exhibitions and the Seed Development Award. She has been a part of several publications on virtual reality experiential learning.

  Alvin Huang is a research assistant within the Architectural Science Program at Ryerson University. Alvin has won several academic honors including the Toronto Society of Architects awards, Toronto Construction Associations Award, and the Industry Supported Architecture Scholarship in Honor of Stewart Crawford. His participation in various architectural competitions has won him the Canadian Center for Architecture Charette First Prize along of the First Prize in the RAIC Emerging Practitioners Competition.