RESEARCH SYMPOSIUM

Room 218 Breakout Session 1 Abstracts

Amanda Bridges, associate professor, Graphic Communications

Dye Sublimation, Digital Printing, Direct-to-Garment Printing, and Graphic Communications Education
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When considering what materials to use for photography and art replication, color and texture characteristics of the substrate impact how the final photograph or art is perceived. Standard white canvas or photographic paper are best suited to match intended colors and are chemically stable to resist environmental conditions when properly protected. Non-traditional substrates, on the other hand, are impacted by environmental degradation, shifts in the intended color reproduction, and potential reactions to coatings and chemicals present in the printing process but add visual characteristics such as texture and reflection. This presentation examines color measurement data collected across two processes—inkjet and dye sublimation—four substrates—glass, metal, tile, and wood—and two environmental factors—high humidity and direct UV light. Findings reveal that some printing processes and substrate combinations outperform others in color reproduction and color fastness upon environmental exposure. When taking these limitations into consideration, fine artists might benefit from expanding substrate and printing choices in order to better align with their artistic vision.

Carl Blue, associate professor, Graphic Communications

Technology, Innovation, and Curriculum Development

The TWIG Technical Writing Initiative in Graphic Communications is an IRB approved research project designed to improve students' learning of technical writing and provide instructors in Graphic Communications with valuable resources. The research aimed to develop a concise supplemental technical writing resource for Graphic Communications majors and instructors, based on assembled competencies gathered from a survey of academics and industry professionals. The survey consisted of 10 topic areas, including terminologies, processes, proposals, reports, abstracts, instructions, documentation, visuals, presentations, and business communications. Participants were asked to assess the importance of listed competencies using a slider tool, and additional space was provided for feedback and additional competencies. No personal information was collected and the final results were shared with instructors and others interested in encouraging technical writing in Graphic Communications. Participants consented to having their responses and feedback used in the research project.

Gerry Derksen, instructor, Graphic Communications

From Sketch to Screen: Enhancing the Design Pipeline with AI
We are entering a period of disruption in design which is up ending the process and in turn changing design education. By extension, the practice and profession will also be changed because of artificial intelligent (AI) tools which use machine learning (ML) technology. Current commercial versions of AI tools have already produced novel results sending a signal to design educators to consider the implications and future of design teaching. This paper introduces a new course being developed at Clemson University in Graphic Communications to develop a pipeline which uses only online AI content generators to produce designs. The output is based on a process divided into seven segments of production and organized into; conceptual thinking, distillation, generation, integration, refinement, analysis, and evaluation. The pipeline will be created, and modified by students who will work through three projects to produce materials that guide their decisions. Curating results is a skill students will learn to evaluate the message function for an audience who will provide feedback. This feedback will be looped into content created using current AI tools based on concepts and prompts shaped for the pipeline and refined again based on audience preferences. This talk is intended to initiate the discussion around a technology that has potential to radically change the way visual communication design is practiced in the near future.