

## **Cyber Design Studio: Using Manual Media Via Internet Connections for Collaborative Design**

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This article explores how Computer Aided Design (CAD) systems can be applicable and integrated into the early stage of design. CAD systems are still technologies that are not broadly accepted as useful to the designer especially in this stage of design because CAD systems use the monitor and mouse which differ from the sketch paper and pen of manual media. This article discusses how manual media and Computer-Mediated Communication (CMC) technologies - video conferencing, in my examples - that employ multimedia and Internet can empower designers by providing them with new ways of working together. For accommodating this approach, a prototype CAD system has been developed in which the system consists of a conventional drawing and extra capabilities. This system allows the designer to work with computer based and paper based tools in the same conventional environment as well as remote communications between the designers. This environment is used as the setting for a case study of design tutorials in the design studio. The analysis of this work provides interesting insight into the traditional roles of design studio as well as the relationship between digital and manual media.