

Plant design with teams of mixed vision capability

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This presentation will describe our efforts to provide a meaningful design experience within the framework of balancing visual and verbal dialog elements. Such efforts stem from the simple fact that pedagogy typical to chemical engineering design must be altered when a visually impaired student is a member of a design team. For example, visual integration of a concept and communication skills that rely on visual interpretation need to be adapted in order to fit the needs of the vision impaired student and the needs of a functioning group. We will discuss how the visual components used to describe processes (flow diagrams), develop manufacturing schemes (simulators with graphical user interfaces or GUI), or explain certain concepts (temperature enthalpy cascades for pinch analysis) are used in design teams with and without a visually impaired member.