Changes We Have Made to the Class

Customer Engagement

As customer engagement is a key to accomplishing many of the learning objectives we set for the course, the opportunity to interact with these customers is critical. Once we established our on-going partnership with the local non-profit Services to Enhance Potential (STEP), we structured the class around the design theme of 'Accessibility in the Workplace' as a launching point for students to identify opportunities for designing assistive technology that will help STEP clients, who experience a wide range of cognitive and physical disabilities, overcome barriers in their workplace. Communication with the customer to obtain feedback at multiple stages in the structured design process is invaluable and takes place at several site visits where the student teams venture to the customer's workplace during scheduled class time. We take an iterative 'build-to-learn' approach which has the student teams building prototypes of varying degrees of detail and functionality to assist with communicating their designs to their customer. In addition, the teams create and give presentations at specific points in the design process we call milestones to communicate their progress and gather feedback from their stakeholders and other professionals in a design review setting. These design reviews were initially in the classroom but have since shifted to the customer workplace. The last visit to the customer workplace occurs at the end of the semester where the teams deliver the working prototype of their design to their customer.

Team versus Individual Points Distribution

As students work on this semester-long project on a team, another important aspect of the class that has evolved over the 3 semesters it has been implemented is the distribution of points between team efforts versus individual efforts. In the early implementations of the course we were very focused on the content delivery and getting the student teams through all of the steps of the design process. This generally entailed a worksheet that the team would turn in for each step that we would work through in class. Each of these worksheets was counted as a team score. Thus in the initial offering of the course, the balance of assessment points was very *team-heavy*. This balance between assessing the team versus the individuals has since shifted to an *equal distribution* between individual assignments and team scores. The team assessments stem mainly from the milestone review presentations and a team binder that tracks their progress through the design process. The individual assignments involve reflection upon their own contributions to the team's progress though the design process and now take the form of a technical paper as well as required weekly blog posts to instructor-created prompts covering a variety of topics ranging from course content, teamwork, entrepreneurial mindset, customer feedback from milestone reviews, etc.

Reflections We Have About the Project

We cannot emphasize enough the degree to which customer engagement has elevated the outcomes of the student projects. This real customer interaction fosters empathetic design while providing a more meaningful classroom experience as students are able to see directly the impact their designs have in creating value – value as it is defined, not by the student or even the instructor, but by their customer. This brings true meaning to the 3 C's and to their entrepreneurial mindset development.