

## **Studies on teaming experience through embedding psychological safety, motivational driver, and cognitive diversity into pedagogy**

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This is submitted as a Work in Progress Poster Presentation:

During a series of classroom-based studies, the authors from school A used two tools to measure students' motivation and the team's psychological safety in the capstone first-year design and problem-solving course at A. Intervention through implementation of Psych Safe modules was initially done along with a modified version of the Basic Psychological Needs Scale to measure motivation (Fall 2019). The recent classroom-based study in the Spring 2021 semester utilized an industry tool published by company X and administered by company Y along with company Z. The author from school B used the same tool in the senior year capstone course, not only for student teams but also for the instructors. Outcome from the application of this tool was further discussed formally with students, facilitated by our industry partners. From this trial it was observed that most of the teams fall into the Fear/Anxiety zone. Also, teams who possess similar behavior and communication style with their instructors tend to perform better. In both cases, the effect of the pandemic lingers resulting in reduced focus and level of engagement. Potential future studies will be conducted independently by each institution, which may consist of: (1) authentic learning and assessment to encourage interaction between students beyond what is guided by the instructor; and/or (2) a qualitative study to compare focus groups between first year students and senior year students in cornerstone and capstone design respectively, for current insights on their experience in teaming without intervention. The assumption is improvement in employability skills such as teaming and collaboration give a better chance for equity in impact; because at the core, diverse perspectives and cognitive abilities should be appreciated in teams. Through this poster presentation we are seeking feedback on both potential studies.

### References:

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