Shifting and Shaping how we Teach and Learn: Introducing Business and Chemistry Students to Equity, Diversity, and Inclusion Issues via Global and Inter-disciplinary Group Projects

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Introduction

- **Experiential learning assignments** enhance student learning by providing them with "hands-on" opportunities to apply course-relevant knowledge to solve a problem in the real world.^{1,2}
- In the Fall of 2021, a novel interdisciplinary, global classroom initiative, connecting Management and Chemistry undergraduate students was launched with the support of the UofT International Relations Office.
- Students worked in interdisciplinary teams alongside global partners to research the chemistry of the COVID-19 vaccine and systemic factors contributing to vaccine hesitancy in disadvantaged communities within 4 major global regions.

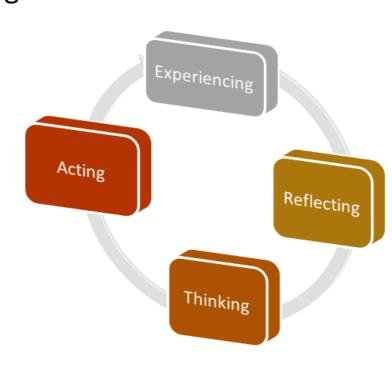
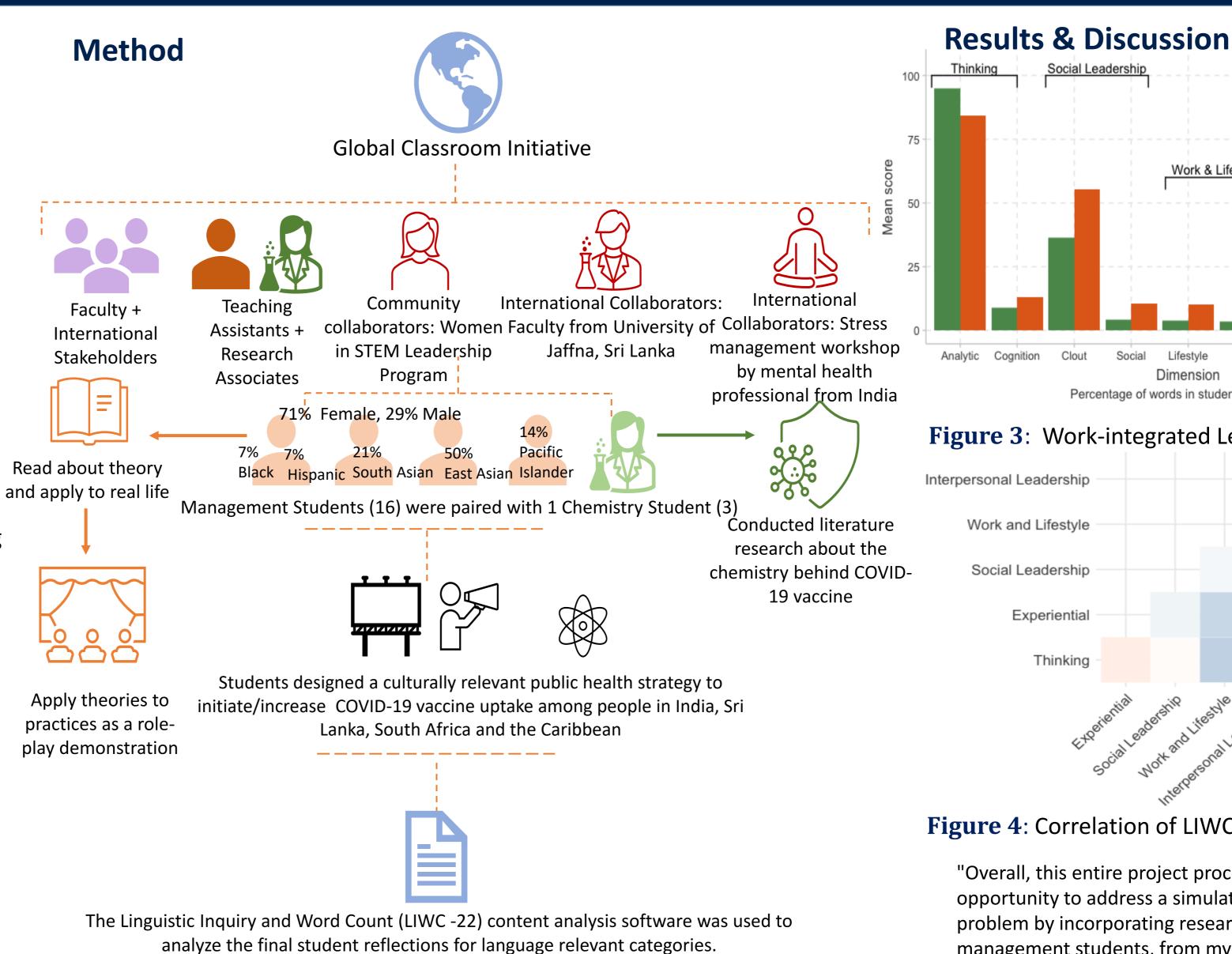


Figure 1: Stages of the Experiential Learning Cycle



Cognition Percentage of words in student responses that fall into LIWC category Figure 3: Work-integrated Learning Scores Interpersonal Leadership Work and Lifestyle Social Leadership Experiential Thinking

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Course

Chemistry

Management

Figure 4: Correlation of LIWC and Leadership Scores

"Overall, this entire project process provided me the opportunity to address a simulation of a real-world problem by incorporating research aid from the management students, from myself a chemistry student....to make a real-world decision...."

Figure 2: Global Classroom Project Structure

Boyd, R. L., Ashokkumar, A., Seraj, S., & Pennebaker, J. W. (2022). The development and psychometric properties of LIWC-22. Austin, TX: University of Texas at Austin. https://www.liwc.app

^{2.} Millenbah, K. F., & Millspaugh, J. J. (2003). Using Experiential Learning in Wildlife Courses to Improve Retention, Problem Solving, and Decision-Making. Wildlife Society Bulletin (1973-2006), 31(1), 127–137. http://www.jstor.org/stable/3784366