

A Community Integration Platform for Health Science Education of Social Emotional Intelligence (SEI) through Collaborative Mixed Reality (MR)

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Project Overview: The MR SEI Community Integration Platform

Visual Schematic



Project Vision

Young adults enter the workplace with solid technical skills, but lacking in workplace Social Emotional Intelligence (SEI).

SEI is a major reason young adults leave the workplace.

Yet, the need for healthcare workers is growing.

We posit that MR and biometric driven, community-based education focused on Work-Based Learning (WBL) will address this challenge.

¹."SEL: What Are the Core Competence Areas and Where are they Promoted?", CASEL, 2021. [Online]. Available: <https://casel.org/sel-framework/>. [Accessed: 18- Jan- 2021].

Project Overview: The MR SEI Community Integration Platform

Use-Inspired Research

- Graduated RISD students enter the Richardson community workforce with solid technical skills, but lacking in Social Emotional Intelligence (SEI).
- SEI is a major reason young adults leave the workplace.
- We posit that MR and biometric driven, community-based education focused on Work-Based Learning (WBL) will address this challenge.

PG Activities

- Planning Grant Team Meetings Conducted
- Two Focus Groups with RISD Students
- One Focus Group with RISD Faculty
- Interview with MRMC Staff Member
- Interview with RISD Counselor
- Development and Submission of an SCC IRG
- Refining Research Approach
- Planning Qualitative Research with Younger High School Students
- Exploring Elementary School Student Research
- Exploring Mapping of SEI Indicators to Biometric Research

Project Update

Research Questions:

- 1) What are key community SEI curriculum needs?
- 2) Which social science paradigms fit best as a platform foundation, e.g. SEL, social learning, and educational psychology related to student response in technology-rich environments?
- 3) What are the key platform technology considerations e.g. advanced intelligent technology selection, networked deployment and user interface design?
- 4) How can user performance assessment and social and community impact of the platform be measured?
- 5) What are the possible new community collaboration paradigms afforded by the platform?

Planning Grant Milestones and Timeline:

- Milestone 1: Deep definition of problem, curriculum needs, and logistics (Months 1-3)
- Milestone 2: Analyze psychology / social science and learning/ social impact (Months 4-6)
- Milestone 3: Research design (Months 6-9)
- Milestone 4: Technology design (Months 6-9)
- Milestone 5: Deliverable: Action Plan for the Way Ahead – key components for full S&CC or similar grant proposal (Months 9-12)

Project Evolution

- Through focus group testing and interviews with RISD faculty and MRMC staff, we've gathered a more thorough understanding of the relationship between student SEI and their WBL experiences.
- Based on the developed Metaverse curriculum, we determined extensive SEI baseline testing and data analysis will be necessary.
- Dr. Parsons, Director of Computational Neuropsychology and Simulation at UNT, will assist the project team by analyzing biometric data collected from study participants through the use of wearable physiological wristbands.

Focus Group Feedback:

RISD Student: *“While I was in clinicals, I saw a catheter being put in....do I have the mental strength and the will to do that?”*

RISD Faculty Member: *“They (the students) just seem so insecure and just so out of their comfort zone... we try to put them into situations where they have to practice, but it's just not the same when they are dealing with people that they don't know.”*

MRMC Staff Member: *“Can I think of a reason why these communication challenges happen? Yes. They (new graduates) may not have all the clinical reasoning skills, they may not have the critical thinking skills, they may not have the self-confidence. That is the biggest reason for that.”*