**Preliminary Findings**

Survey findings*

![Survey Chart]

**Next Steps**

Preliminary Data on student perceptions and experiences indicate that MDS is a promising program. This pilot study will lead into a larger study that will more rigorously assess student’s learning outcomes. Next steps include post-student surveys, evaluations of students’ creative process using the AAC&U VALUE rubric on creativity, and a comparative analysis of students’ interdisciplinary attitudes by comparing those who participate in MDS versus those who have not.

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**Purpose**

To promote interprofessional collaboration and learning between biomedical engineering (BME) students and medical learners that is critical to the design, development, use, and commercialization of safe and effective medical equipment.

**Objective**

- Improved understanding of medical device uses
- Better ability to identify possible use errors and design flaws
- Effective prototyping of re-designs that address use error
- Stimulated creativity process and ability to innovate solution
- Enhanced understanding of clinical or technical perspectives
- More positive attitude towards interprofessional teams

**Methodology**

**Course Timeline:** 13 sessions in Fall 2015/Winter 2016 Semesters

**Participant Demographics:**

<table>
<thead>
<tr>
<th>Engineering Students</th>
<th>Medical Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of participants (N = 50)</td>
<td>Total number of participants (N = 30)</td>
</tr>
<tr>
<td>Undergraduate-Level 33</td>
<td>Medical Student 17</td>
</tr>
<tr>
<td>Graduate-Level 17</td>
<td>Medical Residents 13</td>
</tr>
</tbody>
</table>

**Session Setup (Figure 1-3):**

1. Hands-on simulation of the use of two devices from the MDS device exercises list (Figure 1)
2. Discussion of confusion and use error associated with design following simulation
3. Brainstorming session of novel solutions with BME students and Medical Learners in mixed groups of 3-4 (Figure 2)
4. Presentation of redesigns and takeaway lessons (Figure 3)

**Qualitative Assessment of Experience**

- Retrospective survey
- Focus Group with 11 participants

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[Image of Acknowledgements]