Core Elements of Team-Based Learning

“A special form of collaborative learning using a special sequential approach: group work, independent work, and immediate feedback to create a motivational framework in which students are positively accountable to one another to come to class prepared and contributing to the discussion.”

- Michael Sweet (n.d.)
- Review of Goals and Expectations
- Forming Permanent Teams of 5-7 Members (With Members from Multiple Disciplines)
- Learning Content Through Preparation Outside of Class
  - Readings
  - Lecture Capture
  - Website Reviews
- Accountability – Readiness Assurance Process
  - Individual Readiness Assurance Test
  - Team Readiness Assurance Test
- Frequent and Timely Feedback including Peer Evaluation
- In-Class Activities
  - Small amount of time clarifying concepts from readings
  - Case-based Applications (Significant Problem, Specific Decision)
  - Integrative Assignment

Challenges to Implementing Team-Based Learning in NH-ME LEND

- TBL considered ideal in situations with high student to faculty ratio. (Fatima, et al, 2013; Clark, Nguyen; Menningen, 2013).
- The NH-ME LEND has a very high teacher to student ratio. It can be difficult to get “buy-in” by all faculty when the number of faculty is large (Allen et al., 2013). It can be difficult to create assignments that challenge all team members of diverse teams, support active participation by all team members, while integrating content from all faculty.
- Distant campuses can be an “inhibiting factor” for effective team based learning (Copeland et al., 2013).
- Research suggests that TBL is implemented most effectively on a single campus. Maine and New Hampshire connect through Zoom technology. Maine constitutes a team in itself – making it impossible to assign Maine trainees to teams deliberately and systematically.

Background

NH-ME LEND adopted Team-Based Learning beginning in Fall 2014 to:
- Use a consistent instructional methodology and coordinate instruction across content modules among all faculty.
- Actively engage a diverse group of learners, strengthen trainees’ mastery of content, critical thinking skills, and interdisciplinary team work, and
- Maximize face-to-face time and the use of technology.

Improvements Based on Years 1 – 3 Evaluations

- Expanded strategies to engage a large faculty in TBL methodology.
- Defined clear learning outcomes for each content module.
- Identified “table of contents” readings and developed reading guides based on the learning outcomes to balance quality vs. quantity of preparation materials.
- Developed faculty skills in writing readiness assurance test questions using Bloom’s Taxonomy to improve the assessment process and to ensure focus on content discussions.
- Developed faculty comfort and skill to focus on key concepts during “mini-lectures” to support case application activities.
- Added instruction on providing peer feedback.
- Explained TBL to trainees during the recruitment process so that they were aware of expectations prior to the start of the first semester.
- Improved technology used in connecting two sites during class.
- Kept trainees in same teams for entire year instead of changing at end of 1st semester.

NH-ME LEND Curriculum: Comparing Years 1 – 3

<table>
<thead>
<tr>
<th>Year</th>
<th># of Trainees</th>
<th>Degree to which Case-based Applications led to professional/leadership goals</th>
<th>Degree to which Integrative Assignment led to professional/leadership goals</th>
<th>Degree to which Individual Readiness Assurance led to professional/leadership goals</th>
<th>Degree to which Peer Feedback led to professional/leadership goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1</td>
<td>Not at all</td>
<td>Minimally</td>
<td>Somewhat</td>
<td>Acceptably</td>
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<tr>
<td>2016</td>
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<td>Somewhat</td>
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<tr>
<td>2017</td>
<td>5</td>
<td>Not at all</td>
<td>Minimally</td>
<td>Acceptably</td>
<td>Greatly</td>
</tr>
</tbody>
</table>

Questions for Future Improvement

- How can we continue to integrate higher level critical thinking into Readiness Assurance tests?
- How can we change the course content sequence so that modules are more similar length?
- How can we engage the trainees in complex and challenging case application activities to integrate content and foster leadership skills?