Implementing competency-based education training in a technical and vocational institute in Brunei:
A Gap Analysis
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Case Study Research Questions
1. What is the knowledge, motivational, and organizational needs (KMO) of Mechanical Training Centre instructors to enable them to successfully implement a competency-based approach in their teaching?
2. What are the recommended solutions to closing the 50% gap in KMO for students, in order to achieve 100% employment with local employers in Brunei?

Key Literature
2. Cognitive Theory (Bandura, 2001)

Significance & Findings & Solutions

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<tr>
<th>Causes</th>
<th>Knowledge</th>
<th>Motivation</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Factual</td>
<td>Instructors possess low level of knowledge of the latest job listings currently in high demand in the country</td>
<td>Lack of Active Choice: Instructors did not believe they were capable of teaching CBET due to low self-efficacy</td>
<td>Attitudes of helplessness and hopelessness</td>
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<td>Procedural</td>
<td>Instructors failed to differentiate between the meaning of the terms used to define CBET and PBA</td>
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<td>Instructors did not know how to use proficiency-based approaches</td>
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Solutions
- Equip faculty with accurate data about highest demand jobs in the country
- Conduct professional development on CBET and its application
- Equip instructors with strategies and assessment tools for applying performance-based assessments (PBA)
- Increase instructors’ confidence using CBET by promoting effective leadership strategies
- Promote collaborative leadership among faculty members
- Increase budget in the procurement of more equipment and training facilities for CBET
- Facilitate strategic planning by college management

Implementation
- MTC principal will assign instructors to collect, organize, data, facts and information for manpower planning starting October 1st 2015.
- From 1st September 2015 MTC management will hire a trainer or coach to provide in house training/ workshops for all faculties for the familiarization of CBET.
- By October 29th 2015 MTC principal will ensure instructors acquire skills and knowledge of teaching a CBC. They will develop confidence through applying Bandura (1997) self-efficacy framework as part of the professional development plan in attaining higher levels of teaching mastery.
- By November 5th 2015 MTC instructors will highly proficient in teaching CBET and designing rubrics to measure student’s performance.
- By October 29th 2015 MTC principal will provide leadership training to enhance instructor’s leadership skills.
- From September 19th 2015 MTC instructors come up with a comprehensive student employability strategic plan outlining, mission, goals, environmental analyses by January 1st 2015.

Assessment
Kirkpatrick (2006) Model of Evaluation of: Reaction, Learning, Behavior, Results

Goal 1: By January 1st 2015, MTC instructors will highly proficient in teaching CBET and designing rubrics to measure student’s performance.

Goal 2: By October 29th 2015 MTC principal will provide leadership training to enhance instructor’s leadership skills.

Goal 3: From September 19th 2015 MTC instructors come up with a comprehensive student employability strategic plan outlining, mission, goals, environmental analyses by January 1st 2015.

Areas for Future Research
- Investigate the other key stakeholders administrators, who play a significant role in ensuring that goals to increase graduates’ employability can be realized.
- Implement similar employability studies using the Clark and Estes Gap analysis KMO framework to other 6 technical colleges in Brunei.
- Investigate the causes of problems related to the students with low socio-economic backgrounds to understand the challenges graduates face in attaining employment.
- Understand the causes of other important problems, new survey instruments and interview protocols will be helpful in gathering data.
- Create additional mechanisms, such as observations or focus groups, may also be needed to pinpoint genuine causes for the occurrence of such problems.

Thank you to Dr. Filback, Dr. Robison, Dr. Helena Seli, and my loving family.