Five Doors to Excellence in Medical Education Assessment

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At the end of the symposium, participants will be able to:

- Understand the five doors to successful, quality assessment systems
- Utilize concept mapping through Inspiration software as a planning tool
- Analyze assessment/grading system in MS1-2, clerkship, and residency programs
- Implement practices that lead to competency-based assessment
Learner assessment in clinical & basic science courses, medical clerkships, and residencies is an important and complex task with multiple purposes –

• to certify academic and clinical competence
• to identify areas for further study
• to evaluate learning opportunities
The Five Doors to Excellence in Assessment

- Originated with Richard Stiggens
- The Assessment Training Institute (Portland, OR)
Five Doors

1. Creating achievement expectations that are well-defined
2. Committing to provide accurate assessment info to ALL decision makers (students, teachers, administrators, other stakeholders)
3. Having an assessment-literate culture so that everyone involved knows what are good practices
4. Establishing policy to support the excellence in assessment
5. Planning how to best manage the information gathered through excellent assessment
Stiggens advises us to garner the true power of assessment by using it to gain the following results:

• Evidence of learner achievement for accountability
• Information for internal programmatic decision making
• Information for learners and teachers to inform classroom level decisions
• The insight and motivation learners need to aspire to academic excellence.
We can take advantage of these only if our classroom assessment and standardized tests are of the highest quality. Specific assessment instruments in a competency-based program should have these important qualities:

• Arise from specified goals and clearly articulated achievement targets
• Serve instructional purposes
• Rely on appropriate assessment methods
• Sample student achievement appropriately
• Minimize bias and distortion in assessment results
Four Barriers to developing quality assessment practices:

• Emotions
• Lack of time
• Institutional/cultural beliefs
• Most significantly, lack of "assessment know-how."
Today’s Panel

- Panelists are students in the Master of Science in Medical Education Leadership
- MEL 606 Learner Assessment and Program Evaluation
- Instructor: Dr. Jeff Beaudry (USM)
• The panelists have used INSPIRATION 8.0, a concept-mapping software program, to conduct the planning process for their work.

• They will describe the ways that multiple sources of learner assessment are utilized to provide a summative evaluation that is meaningful to the institution and the individual learner.
• Design: conceptual and procedural knowledge
  – Context, Organization and Schedule/timeline: What are the achievement targets for each instrument and assessment methods? What is the sequence or timeline for the course schedule?
  – Balance of assessment purposes: formative and summative. Are grades based on summative assessment?
  – Examples of assessment instruments

• Summarizing Assessment information: rationale and explanation of how varieties of assessment are summarized and combined into a final grade. Are grades based on achievement factors only or are non-achievement factors such as effort, ability and aptitude included?

• Recent Information for Grades: Do grades reflect the most recent information about learner achievement?
The assessment designs were reviewed using a rubric to assess complex performance as a model for their authentic work.

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<tr>
<th>Criteria</th>
<th>Exceeds (5)</th>
<th>Performance scale</th>
<th>In-progress (1)</th>
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Meta-cognitive Plan: Clear articulation of project’s goals

1. **Goal Setting:** Create a concept map/outline in Inspiration that contains all components.

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<tr>
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<th>Clear, specific and complete goal setting concept map with all components</th>
<th>Complete goal setting concept map but some components left out or unclear</th>
<th>Incomplete and unclear goal setting concept map</th>
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</thead>
<tbody>
<tr>
<td><strong>Exceeds (5)</strong></td>
<td><strong>Performance scale Meets (3)</strong></td>
<td>In-progress (1)</td>
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### Design: Conceptual and procedural knowledge with support of the text and details

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<th>Criteria</th>
<th>Exceeds (3)</th>
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<th>In-progress (1)</th>
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<tr>
<td>2. <strong>Context Organization, and Schedule-Timeline (COST)</strong> – What is the context of the assessment system; what curriculum / program does it fit into? How well organized is the assessment system? Is there an initial visual organizer for the goals? What are the achievement targets (professional performance indicators) for each assessment and what are the assessment methods? How are they put into a sequence or assessment timeline to fit the course schedule? Include an example of an assessment(s) used in this system.</td>
<td>Context is described; assessment system has a clear, coherent organization, including a general timeline or schedule listing of assessment events; achievement targets are included, as well as assessment methods. An example of an assessment is discussed and included in the plan.</td>
<td>Context is mentioned but not fully described; components of the assessment system are presented by not with a clear organization, general timeline or schedule listing of assessment events is in pieces, not a system; achievement targets are included, as well as assessment methods, but may still be unclear. An example of an assessment may or may not be discussed and included in the plan.</td>
<td>Context is not fully described; components of the assessment system are disorganized; general timeline or schedule listing of assessment events is in pieces, not a system; achievement targets and assessment methods may not be included. An example of an assessment may or may not be discussed and included in the plan.</td>
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<td><strong>2. Balance of Assessment Purposes</strong> – How well does the plan balance formative assessment with summative assessment? How well are the assessments differentiated so that the grades reflect summative assessment only? Are grades strictly based on summative assessment?</td>
<td>Shows clear understanding of the balance of formative and summative purposes of assessment, and clear understanding of the formative assessment purposes; refers to a specific example(s) of how grades are strictly based on summative assessment</td>
<td>Shows partial understanding of the balance of formative and summative purposes of assessment; may or may not have examples of how grades are strictly based on summative assessment</td>
<td>Shows little or poor understanding of the balance of formative and summative purposes of assessment; no examples of grading</td>
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<td>3. <strong>Summarizing Assessment Information</strong> – Is there a clear rationale and explanation of how the information from the varieties of assessments are summarized and combined into a final grade?</td>
<td>Clear, specific descriptions how the information from the varieties of assessments are summarized and combined into a final grade</td>
<td>Partial description of how the information from the varieties of assessments are summarized and combined into a final grade</td>
<td>Little or very poor description of how the information from the varieties of assessments are summarized and combined into a final grade</td>
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<td>Are grades based on achievement factors only, or are non-achievement factors like effort, ability or aptitude included?</td>
<td>Clear, specific description of how grades are based on achievement factors only, with the scores excluding non-achievement factors like effort, ability and aptitude</td>
<td>Incomplete description of how grades are based on achievement factors only, with the scores excluding non-achievement factors like effort, ability and aptitude</td>
<td>Little specific description of how grades are based on achievement factors only, with the scores excluding non-achievement factors like effort, ability and aptitude</td>
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<td>4. <strong>Recent Information for Grades</strong> – Do grades reflect the most recent information about learner achievement when it is reasonable to do so” (Stiggins et al, 2004, p. 329)?</td>
<td>Most recent evidence is considered most important and outweighs or “replaces out-of-date evidence when it is reasonable to do so” (Stiggins et al, 2004, p. 329)</td>
<td>Incomplete description of how most current evidence is handled in relation to out-of-date evidence.</td>
<td>No consideration of how most current evidence is handled in relation to out-of-date evidence.</td>
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• Each panelist will have 15 minutes for presentation including a couple of minutes for clarifying questions.  
• After individual presentation, we will have 15 minutes for audience response and perspectives

A door in rural Punjab by Kalid Mahmood