How to Develop an Education Curriculum for Trainees

Brenessa Lindeman, MD, MEHP
Assistant Professor of Surgery
Associate Program Director, General Surgery
Associate Designated Institutional Official for the Clinical Learning Environment
University of Alabama at Birmingham
Disclosures

• No financial disclosures

• I co-authored a chapter in *Curriculum Development for Medical Education*

(I’m a big geek about this stuff)
Objectives

• Why Curricula?

• Necessary Components

• Moving from Curriculum to Scholarship
There Once Was an Idea...

- Fellows should be better teachers
- Residents aren’t prepared for billing and coding when they enter practice
- Let’s teach medical students how to do bowel anastomoses
Six-Step Approach to Curriculum Development

1. Problem Identification and Needs Assessment
2. Targeted Needs Assessment
3. Goals and Objectives
4. Educational Strategies
5. Implementation
6. Evaluation and Feedback
1. Problem Identification and General Needs Assessment

- What is the problem?
  - Who and what does it affect?
  - What factors predispose, reinforce, and enable the problem?

- What is the gap between the current approach and the ideal approach?

- Fellows with poor teaching skills
  - Medical students and residents affected most directly
  - Institution faculty, patients, society also

- Current approach:
  - Faculty model teaching behaviors, not much feedback about teaching

- Ideal approach:
  - Model effective teaching behaviors, give formal feedback about teaching skill
2. Targeted Needs Assessment

- Who is the target audience?
- Who are the stakeholders?
  - How are they impacted?
  - What information do you need from them?

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Role/How impacted by problem?</th>
<th>Relevant information</th>
<th>Assessment method</th>
<th>Resources required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fellows</td>
<td>Target audience</td>
<td>Teaching skill perception / observation</td>
<td>Survey OSTE</td>
<td>Software OSTE Faculty / Facility</td>
</tr>
<tr>
<td>Medical students</td>
<td>Learners</td>
<td>Learning needs</td>
<td>Clerkship evaluations</td>
<td>Database access</td>
</tr>
<tr>
<td>Faculty</td>
<td>Fill in teaching gaps</td>
<td>Volume of teaching effort</td>
<td>Survey</td>
<td>Survey software</td>
</tr>
</tbody>
</table>
3. Goals and Objectives

• Construct an overall educational goal

• Compose objectives for:
  – Individual learners
  – Program

Bloom’s Taxonomy

SMART

Specific
Measurable
Attainable
Relevant
Time Based
4. Educational Strategies

- Create 1-2 educational strategies aligned with:
  - Objectives
  - Resources required

<table>
<thead>
<tr>
<th>General Objective</th>
<th>Specific Learning Objective</th>
<th>Educational Strategy</th>
<th>Resources Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving fellow teaching</td>
<td>Fellows use OMP model</td>
<td>Demonstration / Role Play</td>
<td>Faculty, space</td>
</tr>
</tbody>
</table>
5. Implementation

- What support exists for the curriculum?
  - Whose buy-in is needed?

- Identify existing resources or needs and potential barriers:
  - Personnel
  - Time
  - Space
  - Funding/Costs
6. Evaluation and Feedback

• Who will use the evaluation and for what purpose?
Consider Opportunities for Scholarship

1. Problem Identification and Needs Assessment
2. Targeted Needs Assessment
3. Goals and Objectives
4. Educational Strategies
5. Implementation
6. Evaluation and Feedback

Curriculum as a “Whole Package”
For More Information:

blindeman@uabmc.edu

Reference: