MedEd Track Curriculum Development Activity Worksheet

All of the below questions and description are adapted from “Curriculum Development for Medical Education: A six-step approach” by David Kern

1. What is the problem you are going to address with this curriculum?

   a. Who does it affect (patients, health care professionals, medical educators, society)?

   b. What effects does it have on these people?

2. How is this problem currently being addressed?

   a. How (do you think) it SHOULD be addressed? If it helps, consider using the table below

<table>
<thead>
<tr>
<th></th>
<th>Patients</th>
<th>Health Care Professionals</th>
<th>Medical Educators</th>
<th>Society</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Approach</strong></td>
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<tr>
<td><strong>Ideal Approach</strong></td>
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3. What are the differences between the listed current and ideal approaches?
Targeted needs assessment:

4. Who are your targeted learners?

5. What makes your learners’ situation unique?
   
   a. What are your learners’ prior training experiences?
   
   b. Existing proficiencies?
   
   c. Past and current performance?
   
   d. Attitudes about the topic?

6. Describe your targeted learning environment:
   
   a. What other curricula exist or are being planned for these learners?
   
   b. What are the enabling and reinforcing factors?
   
   c. Barriers to development and implementation of your curriculum?
   
   d. Available resources?
   
   e. Who are the other stakeholders (course directors, faculty, administrators, clerkship directors, APDs, PDs, accrediting bodies)
      i. Do they have needs you must address?

7. What information about your learners and environment is unknown right now? How can you acquire the necessary information?
Goals and Objectives

8. Write 1-3 broad educational goals for your curriculum

9. Write one specific measureable educational objective of each kind using the below table (if applicable). It may be helpful to use the form [Who] will do [How much] [of what] [how well] [by when]

<table>
<thead>
<tr>
<th>Level of Objective</th>
<th>Individual Learner</th>
<th>Aggregate or Program</th>
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<tbody>
<tr>
<td>Learner (cognitive, affective, or psychomotor)</td>
<td></td>
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<tr>
<td>Process</td>
<td></td>
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<td>Health, health care, or patient outcome</td>
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- Types of learner goals
  - Cognitive – knowledge/problem solving based objectives (all along blooms taxonomy from knowledge/recall to synthesis and evaluation)
  - Affective - Attitudinal objectives, referring to attitudes you want learners to have, or values/beliefs they should develop
  - Psychomotor – skill or behavioral tasks. For example history/physical exam, procedural skills

10. Gut check – look back at your goals and objectives: as worded do they lead to educational method and evaluation strategies you were thinking about? If not, either the methods or the objectives may need tweaking.
Educational Strategies:

11. Write one objective from each domain (cognitive, affective, psychomotor) in the top row of the above table.
12. Choose methods that can achieve your objectives (see supplement for an incomplete list of methods)

13. Are you concerned there will be skill decay in your objectives?
   a. If so, choose an additional method that will potentially prevent skill decay

14. Identify resources required to implement these educational methods
   a. Consider: available teachers, costs, time in training program, space

15. Have you included learner centered and/or self directed learning options
Implementation

16. What resources are required for the curriculum you envision in terms of personnel, time, and facilities

   a. Will your faculty require specialized training before implementation?

   b. Did you consider patients as well as faculty and support staff?

   c. What costs does the curriculum have?

   d. Is there a need for external resources or funding?

      i. If so construct a budget

   e. Are your plans feasible with the resources you have available?

17. What is the degree of support from within your institution for this curriculum? Consider stakeholders (course directors, faculty, administrators, clerkship directors, APDs, PDs, accrediting bodies)

   a. Where do you anticipate resistance?

   b. How can you increase internal support, and decrease anticipated resistance?

   c. How likely are you to receive the necessary support?

   d. Will external support be necessary?
18. What sort of administration will be necessary to implement and maintain the curriculum? (Consider structure, communications, operations, scholarship)

   a. How will decisions be made? (By director? Committee? Consensus? Which stakeholders will be involved? Different rules for day to day vs big directional shifts)

   b. How will communications take place?

   c. Are IRB review and approval of any concurrent educational projects needed?

19. What barriers do you anticipate in implementing this curriculum?
   a. Write down the most likely barriers and develop plans to address them.

20. Develop a plan to introduce the curriculum.
   a. Is a pilot feasible?

   b. What are the most critical segments of the curriculum that would be a priority for piloting?

   c. On whom would you pilot?

   d. Can this be phased in or must it be implemented all at once?
Evaluations

21. Who will be the users of your curriculum?

22. In terms of evaluations, what are their needs? How will these evaluation results be used? (Consider: Are the evaluations summative, formative, or both? Will these be learner level, program level or both?)

23. Regarding evaluations, what resources are available in terms of
   a. Time
   b. Personnel
   c. Equipment
   d. Facilities
   e. Funds
   f. Existing data

24. Identify one to three critical questions for evaluation

25. Considering the above, describe the most appropriate evaluation design considering methodological rigor, and feasibility

26. Given the above design, consider the most appropriate measurement methods
   a. Would it be feasible for you to construct and administer the required measurement instruments?

27. What ethical questions are raised by this evaluation (consider effects on patients, learners, teachers, and society)

28. Who will be responsible for data collection?
29. How will the data be analyzed?
   a. Given your evaluation questions, consider the most appropriate statistical method to use

30. List the goals, content, format, and time frame of the various evaluation reports you envision:

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<tr>
<th>Evaluation type</th>
<th>Goals</th>
<th>Content</th>
<th>Format</th>
<th>Time Frame</th>
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