

# Evidence-Based Learning Worksheet for Learners



By:

Satria Nur Sya'ban, M.D. / satria.syaban@lecturio.de

Adonis Wazir, M.D. / adonis.wazir@lecturio.de

This template has been designed to help medical learners reflect on, identify, and make plans to improve how they study. In order to use the template it is advised that the learner would choose one course within a specific time frame so that all the responses they will include in this worksheet have concrete implications on their future day-to-day educational activities

BEME Steps<sup>(1,2,3)</sup>. Steps of the Best Evidence Medical Education approach



Item	Description
Course Name	
Course Code	
Educator	
Start Date	
End Date	

### Step 1: Identify your learning goals

**Personal Goals:** what are your personal goals for this course? Consider both subjective and objective metrics (e.g., scores, feeling of confidence, pass/fail, etc)

---

**Course Learning Outcomes:** list the learning outcomes that your teachers have provided for you for this course

### Step 2: Identify your current situation

**Personal Goals:** looking back at your current study goals, identify where you have fallen short. Do not elaborate on why you did not meet them / how you missed these goals at this point.

---

**Course Learning Outcomes:** refer to the outcomes list you have made in the previous step and mark down the ones you have not been able to fulfill

### Step 3: Reflect on your learning process

**Timing / Scheduling,**  
consider the following questions:

- How did you schedule your studies for this course?
  - Were there spaces between study sessions related to this topic, or was it massed?
  - When independently learning the concept, did you group your studies by subtopics or did you vary them?
- 

**Prioritization / Emphasis,**  
consider the following questions:

- Did the things you studied, memorized, or otherwise prioritized fulfill the outcomes detailed in the first step? List the ones that were not fulfilled by your current / previous study process..
  - Did you compare and contrast similarities / differences between this course and past courses or between different subtopics within this course? Describe how you did them.
-

---

**Retrieval Actions,**

consider the following questions:

- Did you incorporate quizzes and self-evaluations into your learning?
- Were there opportunities to test yourself on your understanding provided in your source material?
- Did you review parts of the course that you have learned about again before the test? How many times did you do that?

---

**Elaborative Actions,**

consider the following questions:

- Were there opportunities to ask how, or why questions on the materials you were learning? (e.g., how does covid-19 cause desaturation in patients? Why do covid-19 vaccines require frequent boosters?)
- If there were, did you ask those questions?
- Did you outline, describe, or otherwise present the taught information again to yourself in a different way? (e.g., mind maps, high-yield notes)

---

**Learning Medium Used,**

consider the following questions:

- What was the predominant nature of the course material? (visual, procedural, etc)
- Were the mediums you used optimal for the nature of the course material? (e.g., Anatomy → visual cues, drawings, diagrams)
- Were the mediums you used optimal for the outcomes set by the course? (e.g., when the outcome said “be able to do”, did your learning medium / process include observing said action and practicing them?)

### Step 4: Reflect on the outcomes of your learning process

Based on your answers to your previous steps, are the studying techniques and process I am using working for me?

Consider any gaps you managed to identify through Steps 1 and 2 when answering this question

- 
- If you feel it is working for you, do the results reflect that?
  - Can you still remember the knowledge in the long run with this study technique?

- 
- If it is not working for you, considering your answers to the Step 3 of this worksheet, why do you think this is the case?
  - Which element of the Step 3 (Timing, Prioritization, Retrieval, Elaboration, Relevance, Modality), do you think is a contributor to this problem?

---

Having identified the problematic elements of your study technique (if any) through the previous question, try to go through the five BEME steps (with adjustments) to find out what existing literature says about them!

Note down your conclusion to the side.

### Step 5: Concretely Plan to Adjust your learning process

A good framework to do so is the **SMART** goal setting framework. Try to set a minimum of 2 - 3 goals on how you will change your learning process in a specific, measurable, achievable, relevant, and time-based manner. List them to the side

**Goals:**

- 1.
- 2.
- 3.

---

#### References

1. Haig A, Dozier M. BEME guide no. 3: systematic searching for evidence in medical education--part 2: constructing searches. Med Teach 2003;25(5):463-84
2. RM. Harden, Janet Grant, Graham Buck R. BEME Guide No. 1: Best Evidence Medical Education. Med Teach. 1999 Jan;21(6):553-62.
3. Masoomi R. What is the Best Evidence Medical Education? Res Dev Med Educ ISSN 2322-2719 [Internet]. 2012 [cited 2021 Apr 6]; Available from: [http://journals.tbzmed.ac.ir/RDME/Abstract/RDME\\_20121022074916](http://journals.tbzmed.ac.ir/RDME/Abstract/RDME_20121022074916)

While not directly paraphrased or quoted in this paper, we also referred to resources we have utilized in creating past educational articles. These articles were written in collaboration with our company's learning-science team. You can find these articles through the following link: [www.lecturio.com/faculty-blog/](http://www.lecturio.com/faculty-blog/)