

## Learners Not Meeting Expectations 2025 AAAAI/ACAAI Winter Program Director's Assembly

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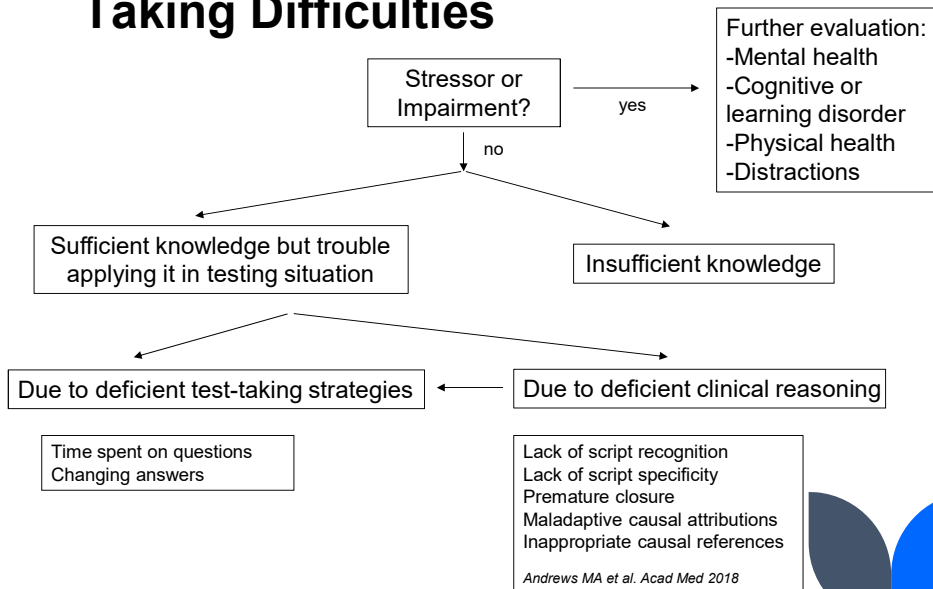
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## Case #1

A first-year fellow performs poorly on their in-training exam,  
and you are concerned that they are at risk of failing their  
board exam.

What do you want to know?

## Approach to the Learner with Test-Taking Difficulties



## Reconnaissance

### Interview

Assess perspective, insight, underlying issues  
Assess test preparation

### Review (prior and current) performance data

Standardized tests  
Clinical performance

### Direct observation

### Collateral interviews

## Case #1, continued

**Scenario 1** – Testing history (USMLE 1 – 187 -> 203; USMLE 2 – 206 -> 214), took board-review courses, studied harder than peers. Fourth quartile in medical school overall, reports clinical grades always brought down by shelf scores. Residency and fellowship clinical evaluations: “Very bright, hard worker, struggles with efficiency when census high and/or patients are complex, occasional errors in medication dosing/ order entry.” Studied a lot for the ITE.

**Scenario 2** – Top 20% of medical school class, high performer in residency at your program, spent additional year as chief medical resident. USMLE 240s. Fellowship evaluations: “Very bright but has not lived up to the hype. Cuts corners. Doesn’t seem engaged, not taking ownership.” She admits not studying much for the ITE.

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## In Small Groups

What could be going on with this learner?

What is your approach to helping this learner?

Consider your programmatic and institutional policies and resources



## Consider referral when...

Underlying mental health condition

Including performance anxiety that is impacting test performance

Struggled with learning in childhood

History of underperforming at any point in their education despite putting in the effort

Trouble finishing tests on time despite studying

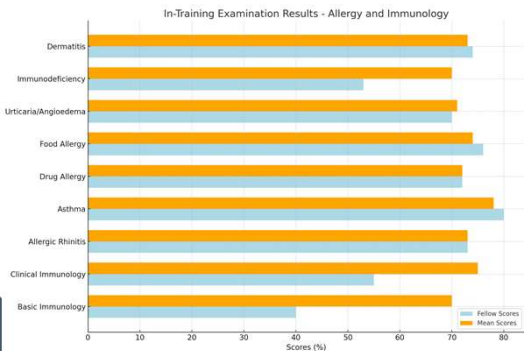
Have been given feedback that they are disorganized, talk over people, interrupt people, have trouble organizing their thoughts or notes

How should we evaluate for and manage learners with **medical knowledge challenges?**

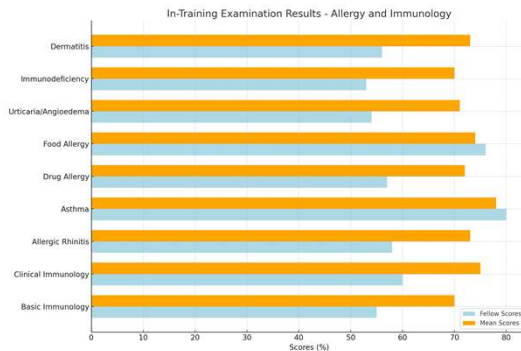
## Case #2

You are referred two fellows based on the results of their ITEs, which are shown below. What would be your recommendations based on these results?

### Fellow #1



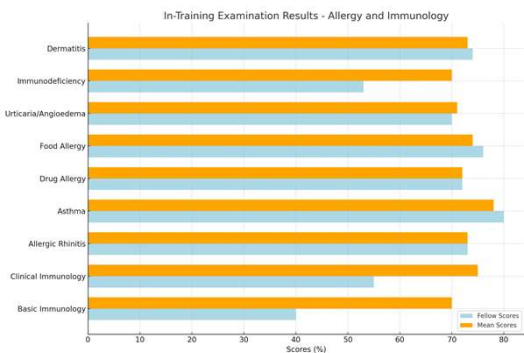
### Fellow #2



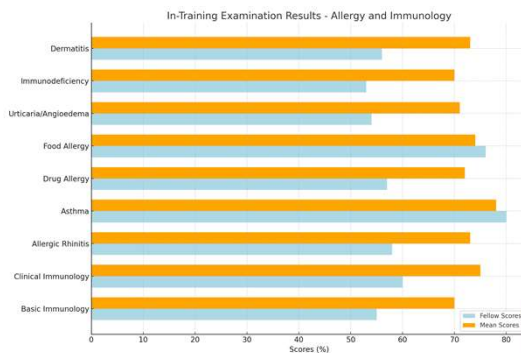
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## Differentiate between global & focal knowledge deficits

### Focal deficits



### Global deficit



## Identify the specific subtype of knowledge deficit

Can they identify the key features in the question stem?

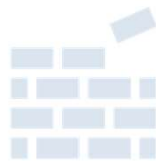
- Problem representation
- Illness scripts

Can they determine the correct answer?

- Schemas
- Differentiating factors in illness scripts



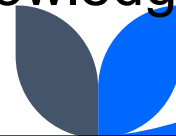
## Prescribe a study plan



**Build** knowledge



**Retain**  
knowledge



# Prescribe a study plan: Build knowledge

## Targeted, active reading

<b>Illness Script</b>		
Risk factors:		
Clinical features:		
Diagnostics:		
Treatment:		
Prognosis:		

	GPA	EGPA
Histologic findings		
Antibodies		
Extrapulmonary sx		

## Content-specific question blocks

# Prescribe a study plan: Retain knowledge

## Regular, random questions

## Build stamina with timed blocks

## Case #3

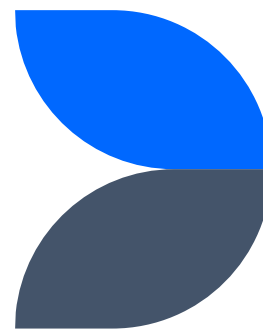
When you meet with the fellow, the fellow reports feeling overwhelmed with the amount of information needed to learn. The fellow is uncertain which resources to use and when to fit in study. On evaluations, the learner is noted to be unprepared for deadlines; components of the fellow's presentations to the attendings and written notes are often out of order and sometimes are missing information.

What could be going on with this learner?

What is your approach to helping this learner?

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How should we evaluate for and manage learners with **organizational challenges?**





# Concerns of learners who have failed a standardized exam:

Common Problems		MedEdPORTAL® The Journal of Teaching and Learning Resources
→	1. I am not sure how many resources to use while I am studying.	Original Publication <span style="float: right;">OPEN ACCESS</span> <b>Study Skills and Test Taking Strategies for Coaching Medical Learners Based on Identified Areas of Struggle</b> Jeannette Guerrasio, MD*, Carmella Nogar, PA-C, Matthew Rustici, MD, Carol Lay, EEd, Janet Corral, PhD
→	2. I don't know how many practice questions to do before the exam.	
→	3. I'm too tired to study.	
→	4. I don't remember what I study.	
→	5. There is too much material to learn.	
→	6. I am easily distracted.	
→	7. I'm too busy to spend hours studying.	
→	8. I have trouble making a study schedule.	
→	9. I have trouble following a study schedule.	
→	10. I prefer to learn by listening.	
→	11. I prefer to learn by doing a task rather than just reading about it.	
→	12. I think I would do better if I could take a review course.	
→	13. I can narrow the answer down to 2 choices... and then I pick the wrong answer.	
→	14. Other than reading the explanation, I don't know what to do when I get a practice question wrong.	
→	15. I can't decide where I should study.	
	16. I should be studying for my upcoming exam, but I really have to pass the test I just failed.	
	17. I have always been a bad test taker	
	18. I performed well on medical school exams, but have always done poorly on standardized exams.	
	19. I scored fine on exams until...	
	20. The grading histogram from the failed exam (if available) shows that I score poorly on all topics and sections.	
	21. The grading histogram from the failed exam (if available) shows I score well on some topics and poorly on others.	
	22. I always score well on certain blocks (e.g. I score well on the first block then fade; I'm a slow starter but do great on the last blocks)	
	23. I would do better if I have enough time to finish the questions on the test.	
	24. I'm very anxious about taking the exam again.	

Guerrasio J, Nogar C, Rustici M, Lay C, Corral J. Study Skills and Test Taking Strategies for Coaching Medical Learners Based on Identified Areas of Struggle. MedEdPORTAL. 2017 Jun 15;13:10593.

Concern:	• Strategy:
How many sources should I use?	<ul style="list-style-type: none"> <li>• Use 1-2 resources with a bank of questions and learn them well.</li> <li>• Obtain recommendations from senior fellows/residents, program director.</li> </ul>
How many questions should I do?	<ul style="list-style-type: none"> <li>• Recommended 1500 (with additional reading of a review series). If not, 2500 questions.</li> <li>• Review the answer, explanation and topic material to ensure understanding.</li> <li>• Use questions more than once.</li> </ul>
I can't remember what I study.	<ul style="list-style-type: none"> <li>• Make diagrams, flash cards, color code notes.</li> <li>• Identify key points.</li> <li>• Write down facts that you will need to memorize.</li> </ul>

Guerrasio J, Nogar C, Rustici M, Lay C, Corral J. Study Skills and Test Taking Strategies for Coaching Medical Learners Based on Identified Areas of Struggle. MedEdPORTAL. 2017 Jun 15;13:10593.

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Concern:	There is too much material to learn.	I can't find the time to learn.	I have trouble making a schedule.
<ul style="list-style-type: none"> <li>• Strategy:</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-read goals and objectives.</li> <li>• Focus on concepts and key points, rather than everything.</li> <li>• Concentrate on materials that the lecturer repeats or highlights.</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on quality over quantity.</li> <li>• Active learning.</li> <li>• Do not attempt to learn an entire topic at once-break down to finite lessons (e.g., not all food allergy, focus on clinical manifestations or epidemiology or treatment)</li> </ul>	<ul style="list-style-type: none"> <li>• Sit down with PD, APD or Chief to create a schedule.</li> <li>• Have a plan for each study session.</li> <li>• Set reminders to keep on track and minimize distractions.</li> </ul>

Guerrasio J, Nogar C, Rustici M, Lay C, Corral J. Study Skills and Test Taking Strategies for Coaching Medical Learners Based on Identified Areas of Struggle. MedEdPORTAL. 2017 Jun 15;13:10593.

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Concern:	I don't know where to study.	I have trouble following a schedule.
<ul style="list-style-type: none"> <li>• Strategy:</li> </ul>	<ul style="list-style-type: none"> <li>• Find your best environment to learn               <ul style="list-style-type: none"> <li>• Library</li> <li>• Coffee House</li> </ul> </li> <li>• Mimic test conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Keep yourself accountable→ set deadlines and create rewards.</li> <li>• Create a calendar or spreadsheet for accountability.</li> </ul>

Guerrasio J, Nogar C, Rustici M, Lay C, Corral J. Study Skills and Test Taking Strategies for Coaching Medical Learners Based on Identified Areas of Struggle. MedEdPORTAL. 2017 Jun 15;13:10593.

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# Study Tips & Exam Strategies:



## Study Skills & Exam Strategies

### How to Drink From a Fire-Hose Without Drowning

Successful study strategies in medical and pharmacy school

April Apperson, UC San Diego SOM

#### What are the fundamental processes in successful active studying?

1. **Identify** the important information — answering the eternal question of "what's important here?"
2. **Organize** the information — create **chunks** of information in **patterns that facilitate memorization** and emphasize the connections needed for **application** questions, e.g., for differential diagnosis.
3. **Memorize** the information — this is an **active** process and **not** just reading it over enough times. Don't put this off because "I'll just forget it again". Memorize your chunks and patterns as soon as possible, then review the main points each time the topic appears again. It's annoying, but more efficient, and the information will get into long-term memory more effectively.
4. **Apply** the information to more complex situations — practice this before the exam.

<https://medschool.ucsd.edu/education/md-combined/curriculum/oess/skills-strategies/index.html#Why-should-I-change-my-study-st>

#### What are the goals of an active study plan?

1. **Create** as quickly as possible the study sheets, aka study aids, that together contain the needed information organized into chunks and patterns that promote memorization and integration.
2. **Memorize** and **Synthesize** that information by applying it in all available practice formats, e.g., practice questions, small group conference or problems sessions, quiz questions, etc.

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#### Tips on Organizing, Memorizing, and Applying the Material

##### General Tips:

- Design your study aids to illustrate a **logical sequence** within the material and emphasize **connections or comparisons**.
  - The analysis of the information needed for this is active studying! The resulting study aids work with known aspects of memory, which decreases the burden of "rote" memorizing.
  - **People remember stories rather than unrelated facts**. The order of headings in a chart or flow diagram, or the placement of the elements within a diagram should reflect a time-line or location or relationships in a logical order - this can act as the "story".
  - Studies show that the more **connections** within the information being organized or studied, the better and longer you will remember it. And virtually all people remember visual patterns better than paragraphs of text.
  - **Flow diagrams or pictures or graphs** are more effective than writing out a sequence of sentences or long descriptions.
  - For detailed material, start with a simpler, more memorable overview that identifies each topic by a **key word or phrase** to establish the connections and the "story". Create further flow diagrams or organizations for each topic within the overview that needs more detail.
- For lists, charts/tables and flow diagrams, use the **rule of 5**: no more than five items under one heading. If you need more, then decide how the items are logically divided into subgroups and create subheadings.
- Don't recreate the wheel. If you find a good chart in some text or other source, add it to your summaries. Customize it by crossing out non-core material and adding any needed material from lecture - use color to make changes stand out.

<https://medschool.ucsd.edu/education/md-combined/curriculum/oess/skills-strategies/index.html#Why-should-I-change-my-study-st>

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# How to Organize Study Materials:

Deciding on the headings and subheadings in a list or table, or how the information is organized in a flow diagram, is the **ACTIVE** part of the process.

Pick a model that flows logically and visually emphasizes distinguishing features.

Finding connections between different topics helps memorization.

Use tables to compare/contrast related processes or structures.

Flow diagrams are useful for organizing related topics.

Graphs are useful to present complex relationships in a simple visual pattern.

<https://medschool.ucsd.edu/education/md-combined/curriculum/oess/skills-strategies/index.html#Why-should-I-change-my-study-st>

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Use a "default" heading sequence:

- For molecular processes: fundamentals, initiation, elongation, termination, processing.
- For cytokines, hormones: structure, synthesis, receptor and signaling, biological effect and regulation.

Create "big picture" charts, flow diagrams or pictures that organize **KEY** related topics from multiple lectures/sources.

Getting information into long-term memory requires multiple repetitions and active memorization -"reading over" material is NOT efficient.

Memorize how many subheadings.  
Memorize the subheadings in order.  
Assign key words or phrases for blocks of information.

<https://medschool.ucsd.edu/education/md-combined/curriculum/oess/skills-strategies/index.html#Why-should-I-change-my-study-st>

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## Key References

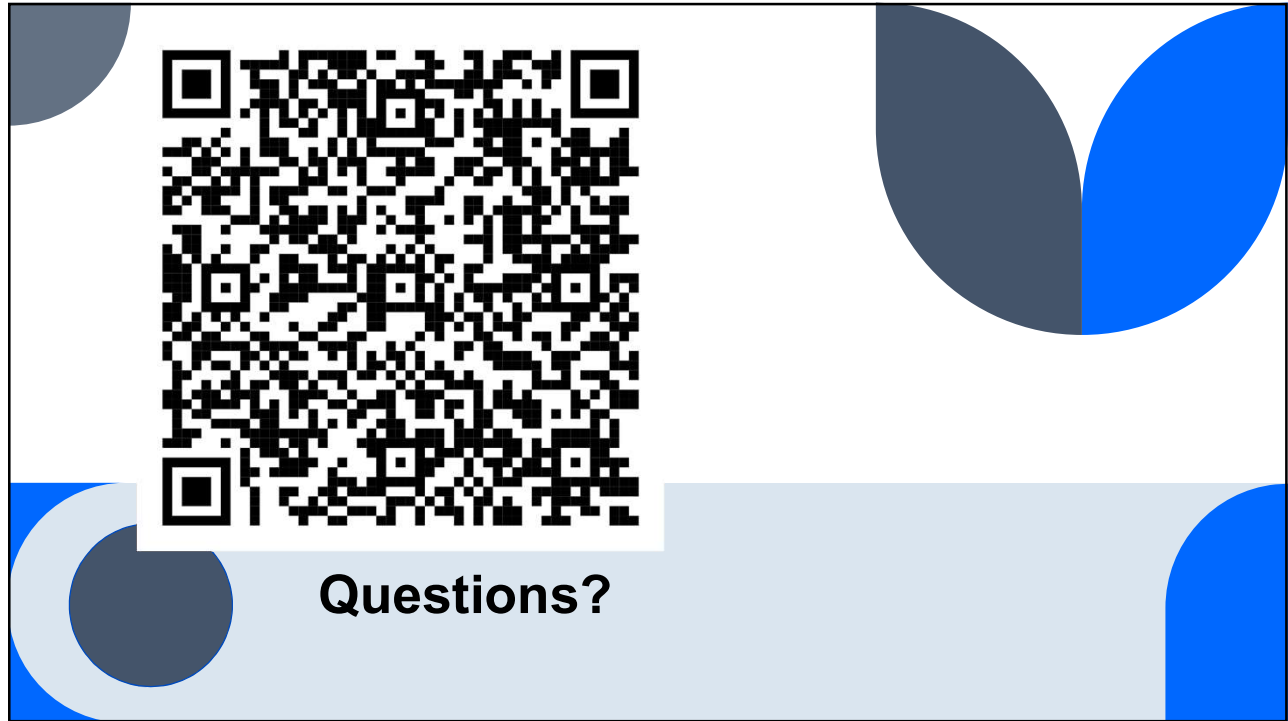
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A slide with a white background and a light blue footer. A large QR code is positioned in the upper left. To its right is a decorative graphic of two overlapping semi-circles, one dark grey and one bright blue. The footer is a light blue horizontal bar with a dark blue semi-circle on the right side. The text "Questions?" is centered in the footer.

Questions?