

How to

# Ensure Durable Learning in Medical Education

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Online Seminar




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Medical Education Needs to Keep Pace with an  
Ever-Changing Knowledge Landscape



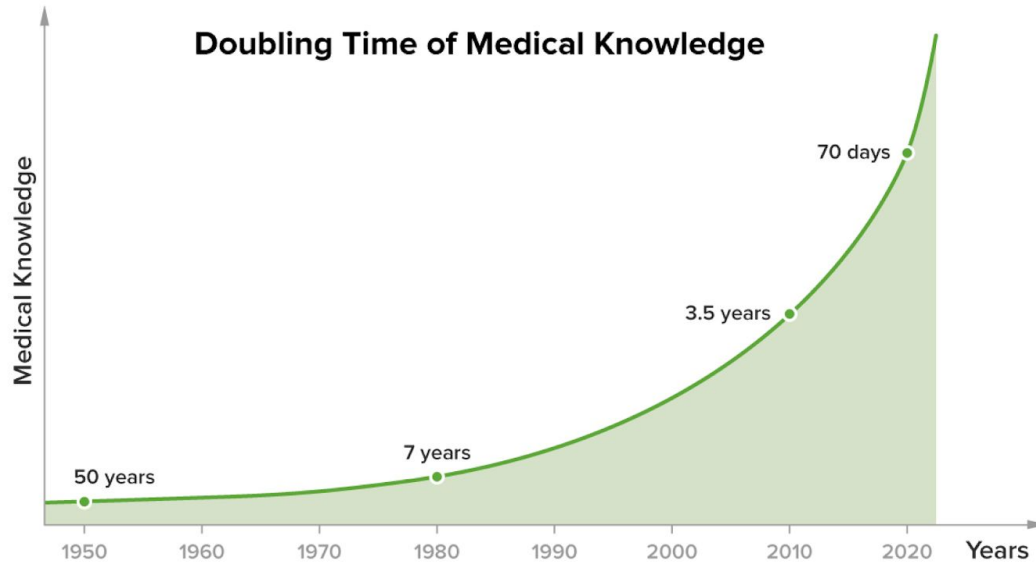
# An Era of MedEd Challenges - Current Situation

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An Explosion of Knowledge

**As of 2020, medical knowledge doublings are estimated to occur every 73 days<sup>1</sup>**

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# An Era of MedEd Challenges

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Primary School



Snacks & Recess

Secondary school



A Few Papers & Readings

Medical School



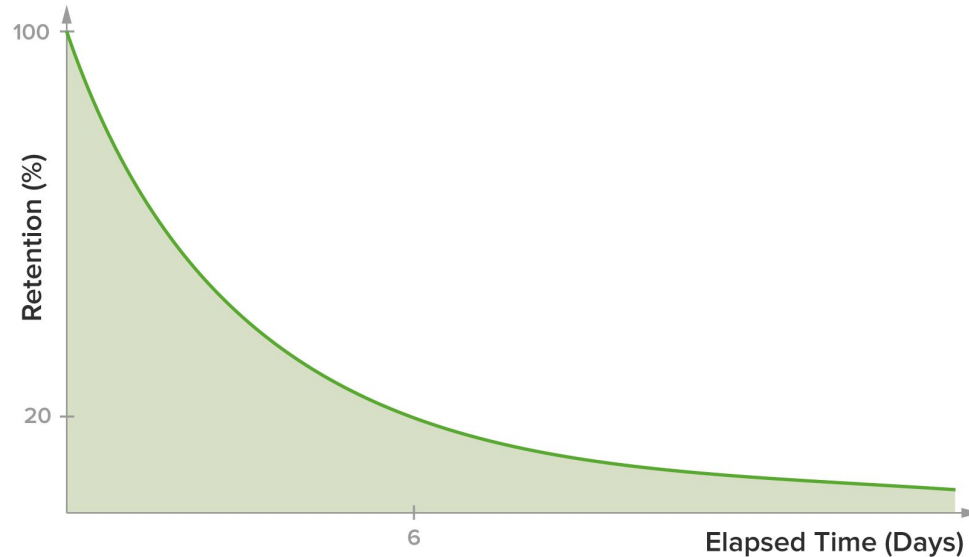
Make it Stop!



# An Era of MedEd Challenges - Current Situation

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Impossible to keep up!

**With no attempt to retain, 75% of acquired information is lost within 6 days**



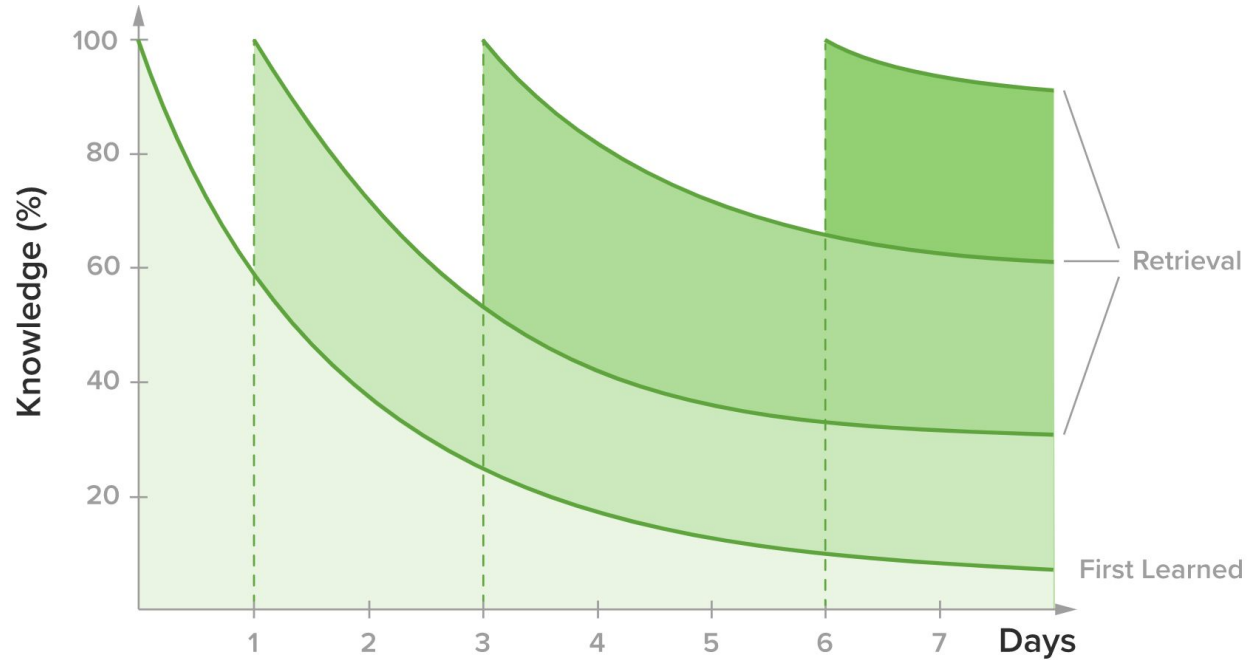


# Keeping Pace Requires a New Approach to Medical Education



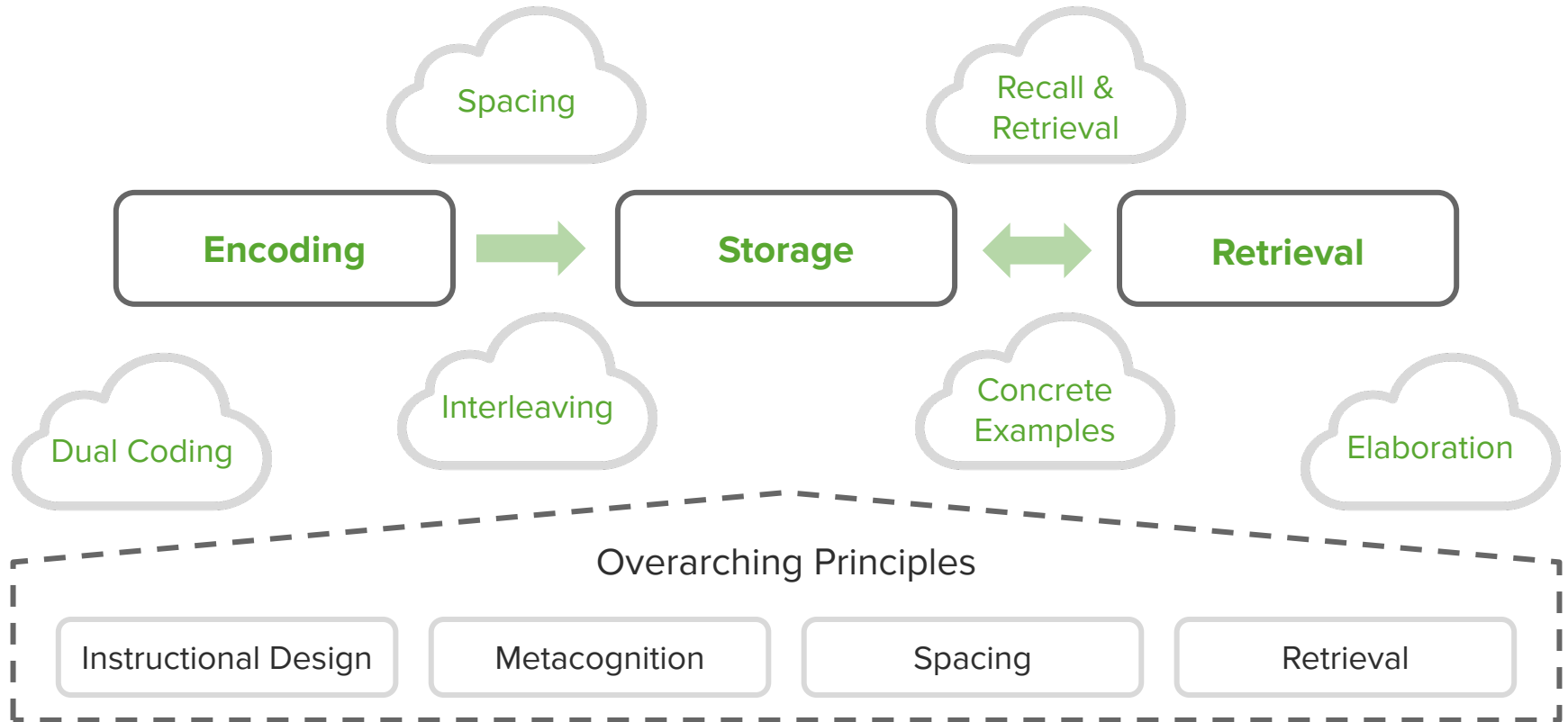
# The Forgetting Curve Modified by Spaced Retrieval

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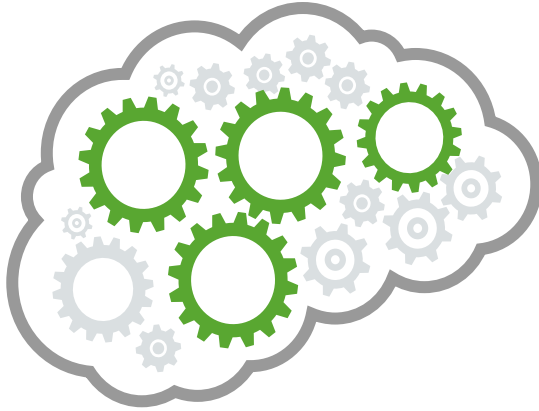
# Learning Science Strategies

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# An Era of Innovative Solutions

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**Application of learning science  
strategies to improve the process of  
knowledge acquisition, retention, and  
understanding**

Medical School



**Optimized Learning**



Evidence-Based Medical Education is the Way  
Forward



# Evolving Role of the Medical Educator

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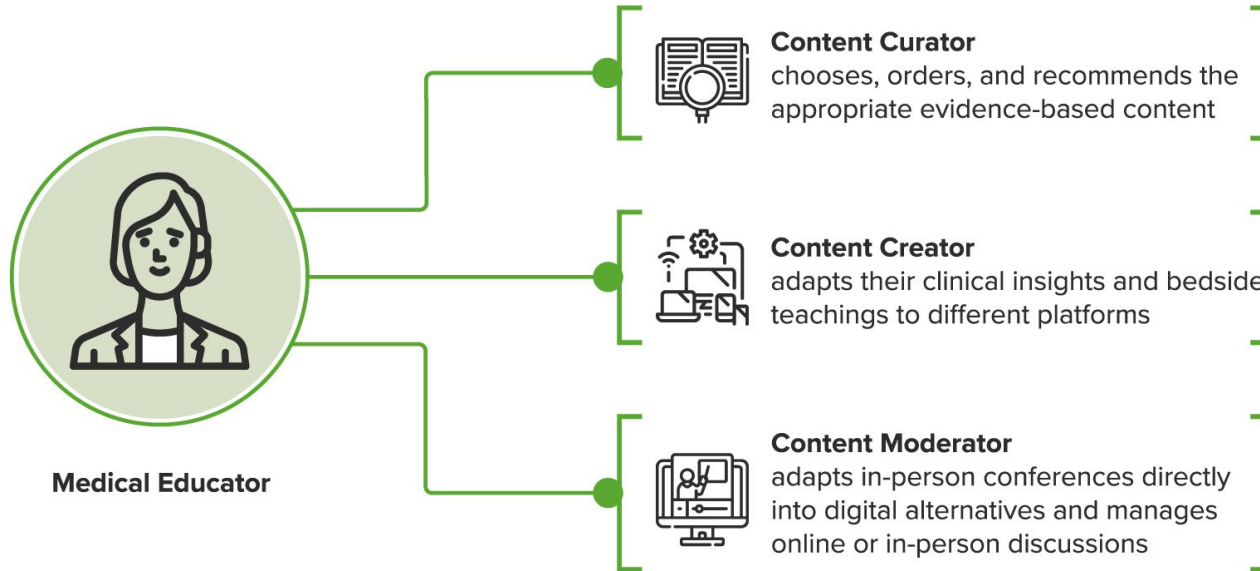
*Teachers augment, monitor, and guide learning*

How?

- Sage on stage?
- Guide by the side?
- A combination of both?

# Emerging Online Teaching Methods Impose New Requirements on Medical Educators

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# The Flipped Classroom is Not Something to Be Feared

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The Flipped Classroom



# Discussion Session

How do you see the role of educator in your institution?

37%	<b>Lecturer</b>	7%	Content Curator
19%	Coach	22%	Content Moderator
11%	Content Creator	4%	Other

Have you implemented evidence-based learning strategies?

10%	Spaced Retrieval	19%	<b>Metacognition</b>
10%	Spaced Learning	14%	Elaboration
5%	Interleaving	10%	Generation
5%	Dual Coding	10%	None
19%	<b>Concrete Examples</b>		

What challenges have you encountered in implementing these strategies?

“Students feel as if they do not have enough time to implement these strategies due to the amount of information they are attempting to intake. They spend a lot of their time either listening to lectures and taking notes or just doing question banks without learning the material.”

“Breaking my own traditional approach to learning”

Which learning strategies do you feel have the best outcomes in terms of students' performance and mastery of material?

17%	Spaced Retrieval	33%	<b>Concrete Examples</b>
8%	Spaced Learning	17%	Elaboration
8%	Interleaving	8%	Generation
8%	Dual Coding		



# Discussion Session

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Have you tried platform-based approaches to implementing these strategies?

29% Yes  
71% No

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Have you been able to study the effect of implementing evidence-based learning strategies?

33% Yes  
67% No

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Are you interested in doing so?

89% Yes  
11% No

I usually address the concept of effortful/durable learning with first semester students in my orientation lecture with them in clinical anatomy. Then I follow that up with some type of PBL & TBL. Along the line I still get questions from students about how to study anatomy. I usually refer them to the introductory teaching. I also plan to repeat those effortful learning slides mid-semester and in the second semester, starting from the May semester.

What else do you advise?

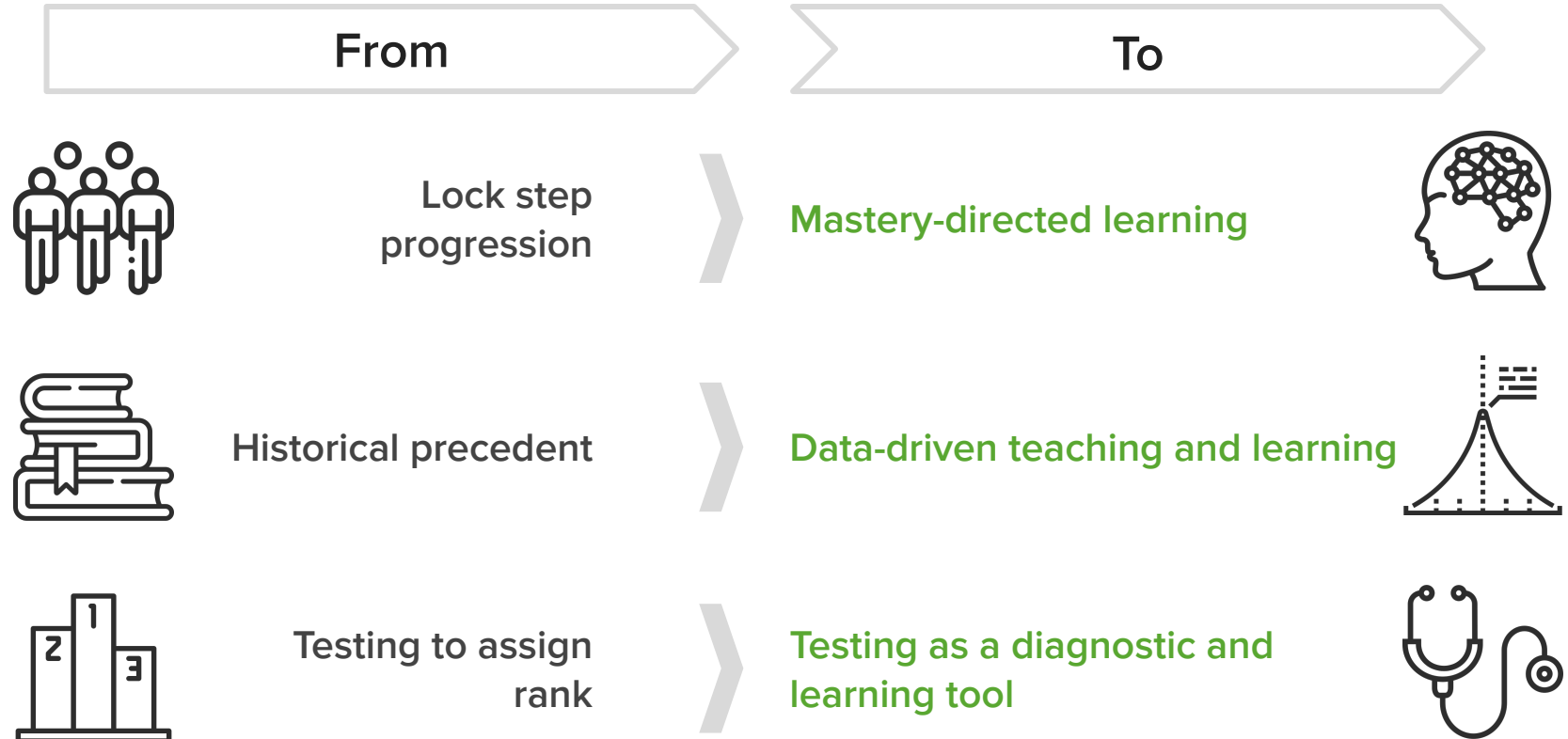
This semester I introduced tutorials tailored towards concepts perceived by my students as challenging in clinical anatomy, (not more than 5 concepts a week), on a date and time agreed to by all. I am yet to receive a single suggestion of a concept to be discussed. That is not to say they do not have any challenging concepts. What do I do next?

Students show lack of knowledge about basic sciences, this makes understanding of the current topic more difficult. Thus we spend time to remind some aspects and this increases the time of lecture, although the topic itself usually is not small. Students feel tired but neglecting of basic information leads to misunderstanding. Can we manage this problem somehow?

My worries are the module that can be effective for hands-on practical skills in medical education. students need to observe and confirm micro-organism microscopically, check the pathological slides. how can the online fill this gap especially in Africa.

# Digital Platforms Have Emerged as a Response to New Challenges

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Contact us

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