



# Today's Speaker

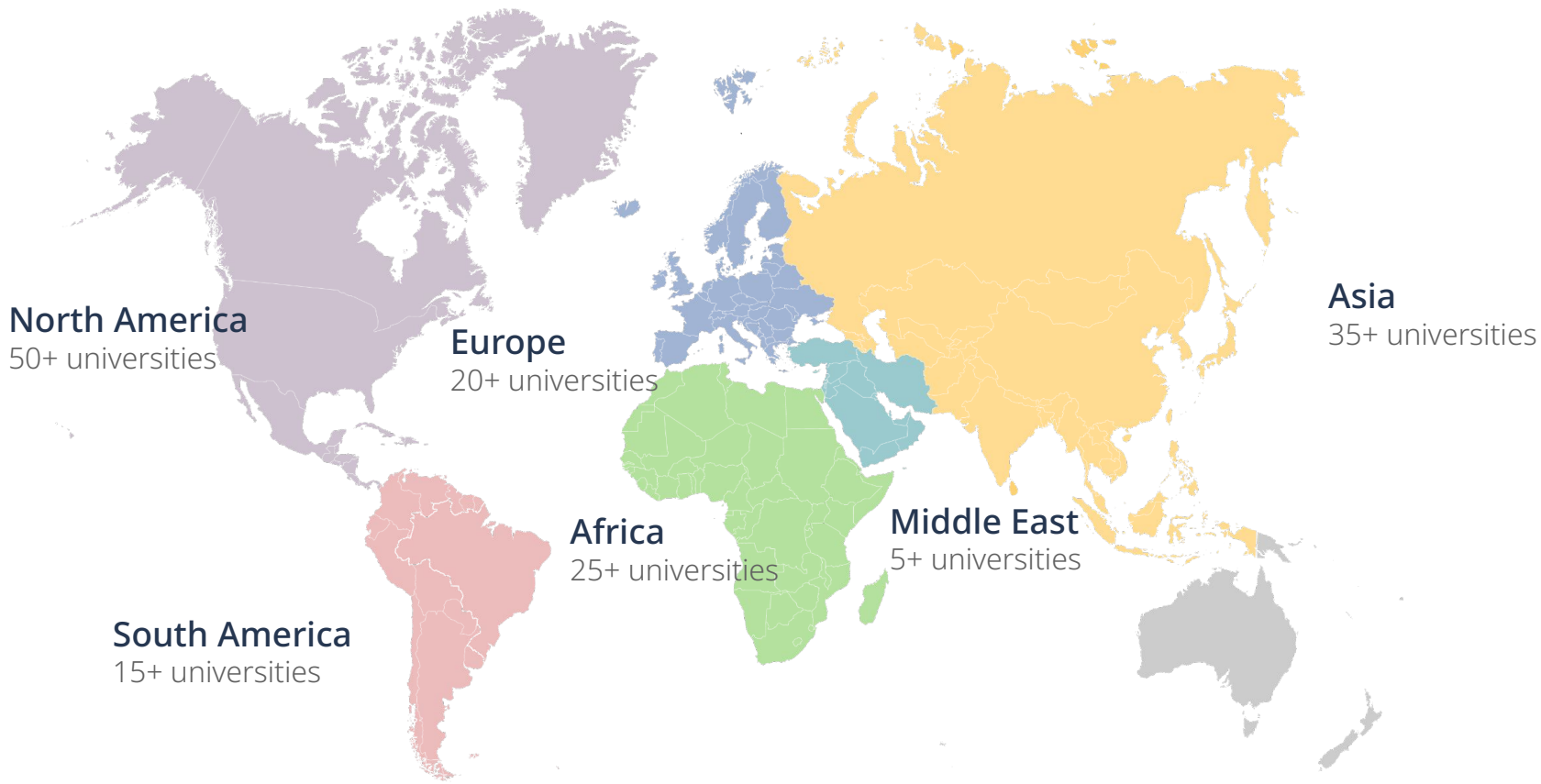


## **Adonis Wazir**

Medical Doctor, East Surrey Hospital,  
United Kingdom

MSc Medical Education candidate,  
Swansea University Medical School

Medical Education Consultant,  
Lecturio



**North America**  
50+ universities

**Europe**  
20+ universities

**Asia**  
35+ universities

**South America**  
15+ universities

**Africa**  
25+ universities

**Middle East**  
5+ universities



## Today's Agenda

- 1 Introduction to Lecturio
- 2 What is Problem-Based Learning (PBL)?
- 3 Why use PBL?
- 4 How to use PBL
- 5 How Lecturio can support



**Who are we?**

# Lecturio

comprehensive digital medical  
education platform

Content from top professors including from



Lecturio Covers the Entire  
**Medical & Nursing**  
Curricula in all key learning formats



**12,000+ High-End Videos**

in TV quality, short, and engaging



**9,800+ Clinical Cases**

with text and video explanations



**35,000+ Recall Questions**

using a spaced repetition  
algorithm and adaptive review



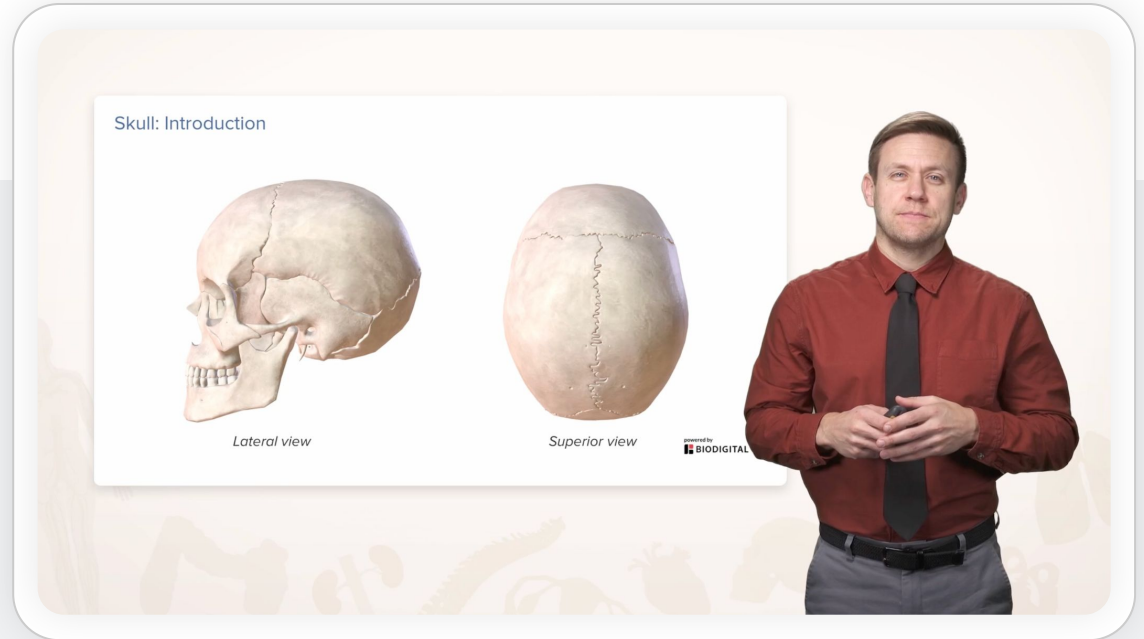
**1,500+ Concept Pages**

organized in a comprehensive library



# Concise Videos on All Key Concepts

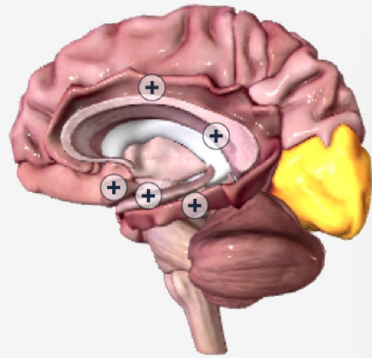
- All key medical concepts are covered in-depth
- 3-9 minutes
- Linked recall questions for formative assessment



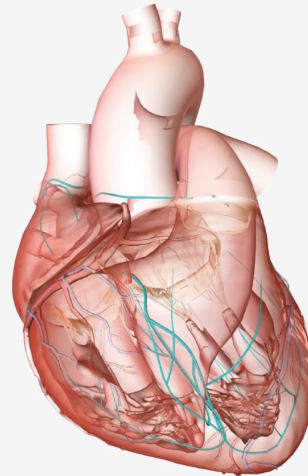




# 3D Anatomy With 400 Pre-Mapped Views

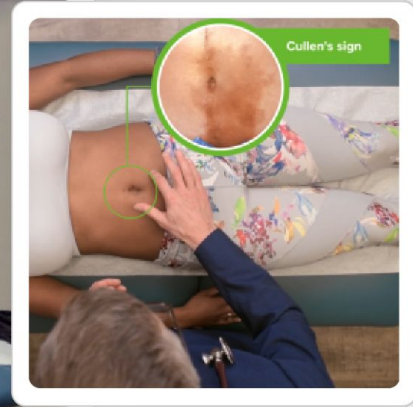
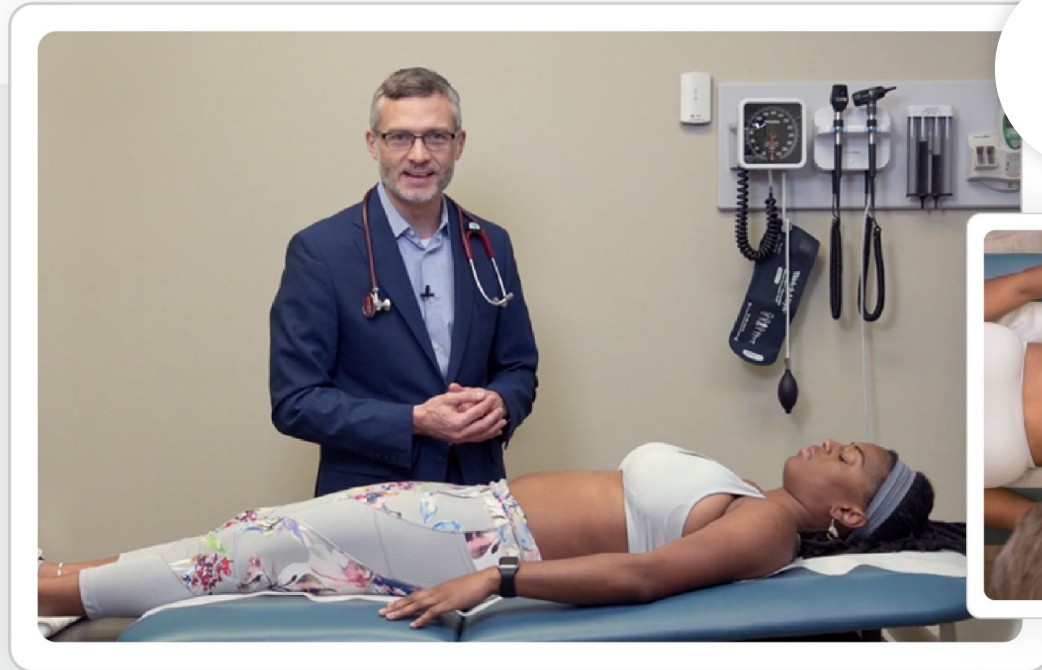


Right occipital lobe



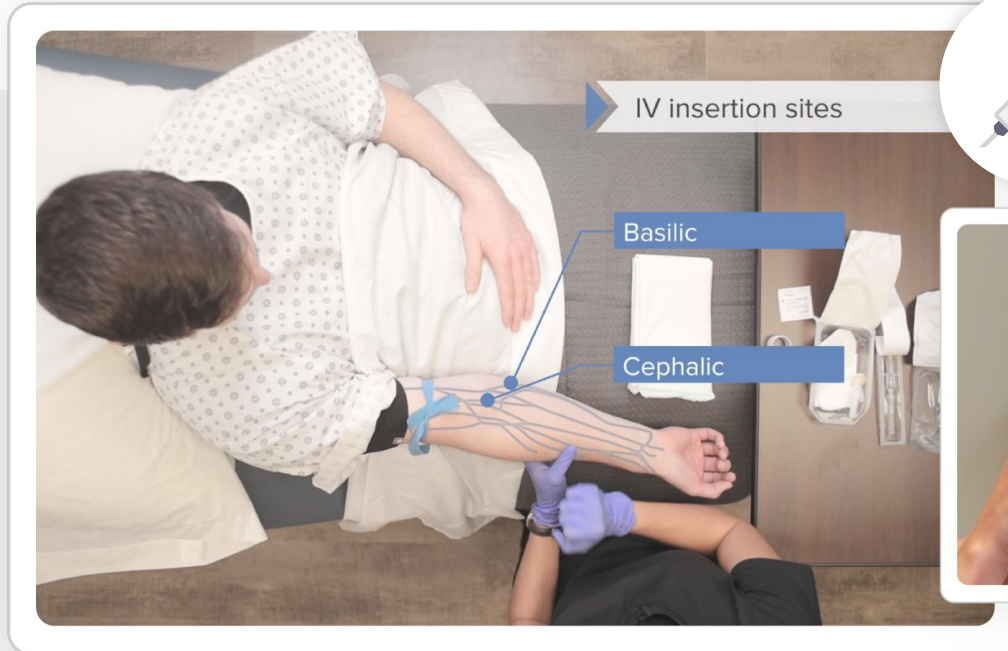


# Comprehensive Coverage of Clinical Skills





# Comprehensive Coverage of Clinical Skills





# Clinical Cases to Practice Application of Learned Concepts

- Real-life clinical scenarios
- Automated feedback
- Linked videos
- Use for self-directed learning or exams

The screenshot displays a user interface for a clinical case application. On the left, a vertical list of numbers from 1 to 14 is shown, with number 5 highlighted in blue. The main content area features a question with four horizontal lines representing text, followed by four multiple-choice options labeled A, B, C, and D. Option D is selected, indicated by a green circle. Below the options, a green checkmark and the word "CORRECT" are displayed. To the right of the question is a chest X-ray image. Below the X-ray, there are three sections: "Explanation" with a diagram of the lungs and heart, "Related Videos" with a play button icon, and "Book References" with a list of references. On the right side of the interface, there are three floating panels: "Custom Tests" with a "CREATE CUSTOM TEST" button, "Difficulty" with radio buttons for "Easy", "Normal" (selected), and "Hard", and a panel for filtering content by "Subjects" and "Systems" with checkboxes and progress indicators.



# Detailed Learning Paths

for USMLE<sup>®</sup> Step 1, 2, NBME  
Subject Exams, NP, NGN & More

- Learning Paths combine video and Qbank blocks
- **Adaptive review** within each path

Learning Paths

Next Gen NCLEX-RN<sup>®</sup> (NGN)  
NCLEX-RN<sup>®</sup> Prep

START

10%

**Subjects**

| Course       | Answered | Completion | Correct | Accuracy |
|--------------|----------|------------|---------|----------|
| Biochemistry | 4/4      | 100%       | 2/4     | 50%      |
| Histology    | 6/6      | 100%       | 6/6     | 100%     |

**System**

START ADAPTIVE REVIEW

| Course                | Answered | Completion | Correct | Accuracy |
|-----------------------|----------|------------|---------|----------|
| Cardiovascular System | 3/3      | 100%       | 1/3     | 33%      |
| Nervous System        | 4/4      | 100%       | 3/4     | 75%      |

# Lecturio Concept Pages

The fastest and easiest way to find and fill knowledge gaps

## Heart: Anatomy

The heart is a 4-chambered muscular pump made primarily of cardiac muscle tissue. The heart is divided into 4 chambers: 2 upper chambers receiving blood from the great vessels, known as the right and left atria, and 2 stronger lower chambers, known as the right and left ventricle pump blood throughout the body. Blood flows through the heart in 1 direction, moving from the right side of the heart, through the lungs, & returning to the left side of the heart, where it is pumped out to the rest of the body. As blood moves through the heart, 4 important valves backflow. The heart muscle itself is supplied by the coronary arteries. The heart also has its own conduction system, triggering its own contractions.

Last updated: March 10, 2023

0/10 questions correct

START TEST

### CONTENTS

General Structure and Location of the Heart

The Pericardium

The Heart Wall

Heart Chambers and Valves

Blood Flow through the Heart

Coronary Circulation

Cardiac Conduction System

Clinical Relevance

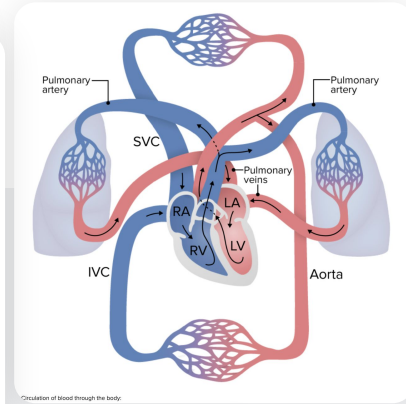
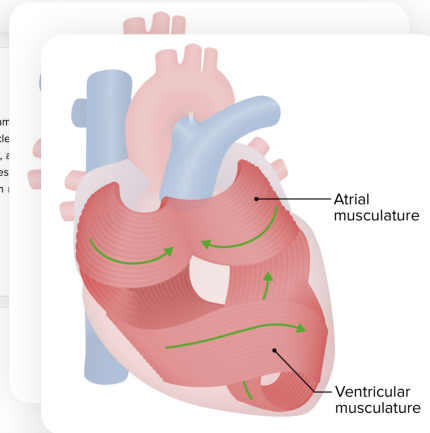
References

## General Structure and Location of the Heart

### Overview of the heart structure

The heart is a 4-chambered muscular pump made of cardiac muscle tissue.

- 4 primary muscular chambers:
  - Right atrium (RA)
  - Right ventricle (RV)
  - Left atrium (LA)
  - Left ventricle (LV)
- Connections to the great vessels:
  - Veins (bring blood back to the heart):
    - Superior and inferior vena cava (deoxygenated) → RA
    - Pulmonary veins (oxygenated) → LA
  - Arteries (carry blood away):
    - Pulmonary trunk and pulmonary arteries (deoxygenated) → from the RV
    - Aorta (oxygenated) → from the LV



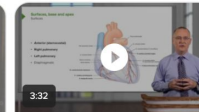
## Related videos



Cardiovascular System – Anatomy of the Heart



Components of the Heart – Anatomy of the Heart



Surface Anatomy of the Heart – Heart (Cor)

# The Two Sides of Precision Health Science Teaching

For Students

Personalized smart tutor

The interface shows a central video of a male instructor. To the left, there are 'Downloadable Slides' and 'Learning Objectives'. To the right, 'Learning Paths' for 'Pharmacology Exam Prep' is shown with progress bars. Below the video, there are sections for 'Explanation' (marked 'CORRECT'), 'Question Bank' (24% progress), and 'Spaced Repetition' (a table with 12, 8, and 5 items). Other sections include 'Related Videos' and 'Book References'.

| Item   | Count |
|--------|-------|
| Blue   | 12    |
| Yellow | 8     |
| Red    | 5     |

For Faculty

Digital teaching assistant

The dashboard provides an overview of student activity and performance. It includes metrics for 'Watched Minutes' (884) and 'Viewed Concept Pages' (367). It also shows 'Answered Qbank Questions' (238, 67% correct) and 'Answered Recall Questions' (285, 48% correct). A 'Performance' section features a donut chart for 'Total 2137' with a legend for Correct (green), Incorrect (red), and Omitted (grey). Finally, a 'Potentially At-Risk Learners' table lists students by name, risk score, and accuracy.

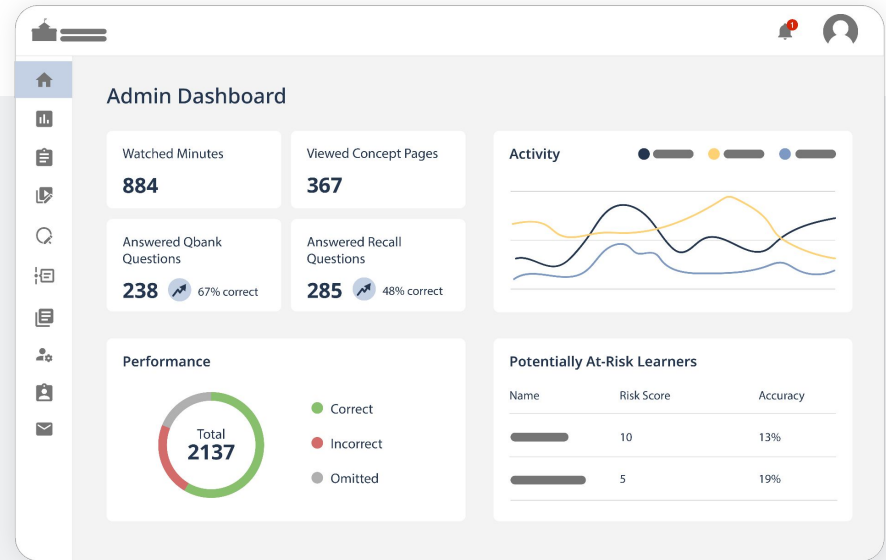
| Name       | Risk Score | Accuracy |
|------------|------------|----------|
| ██████████ | 10         | 13%      |
| ██████████ | 5          | 19%      |



# Comprehensive Tracking Enables a Comprehensive Live Faculty Dashboard

The system tracks:

- competence
- confidence
- overconfidence
- spaced repetition adherence
- mastery level
- typical mistakes
- readiness assessments

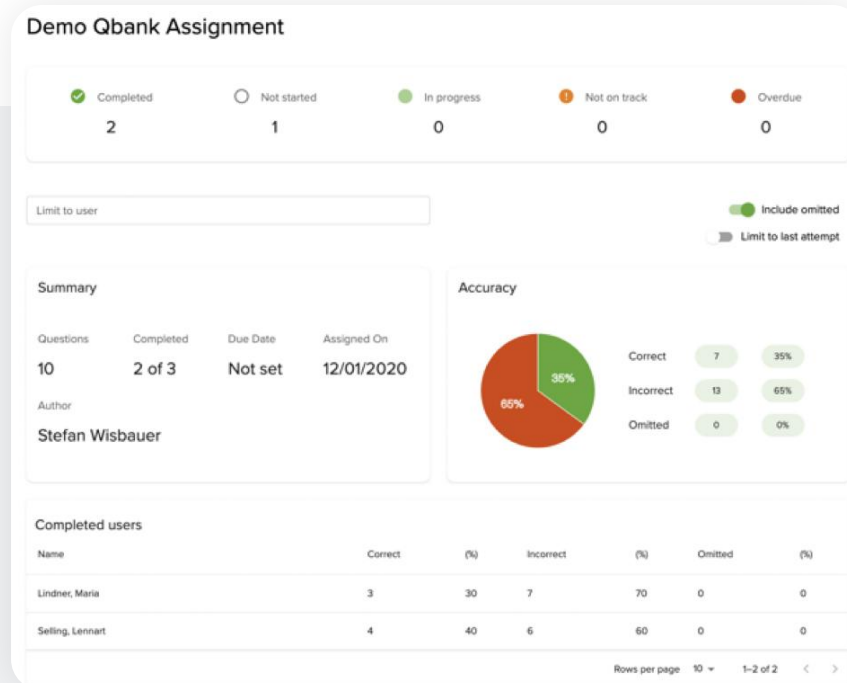






# Assignment Stats

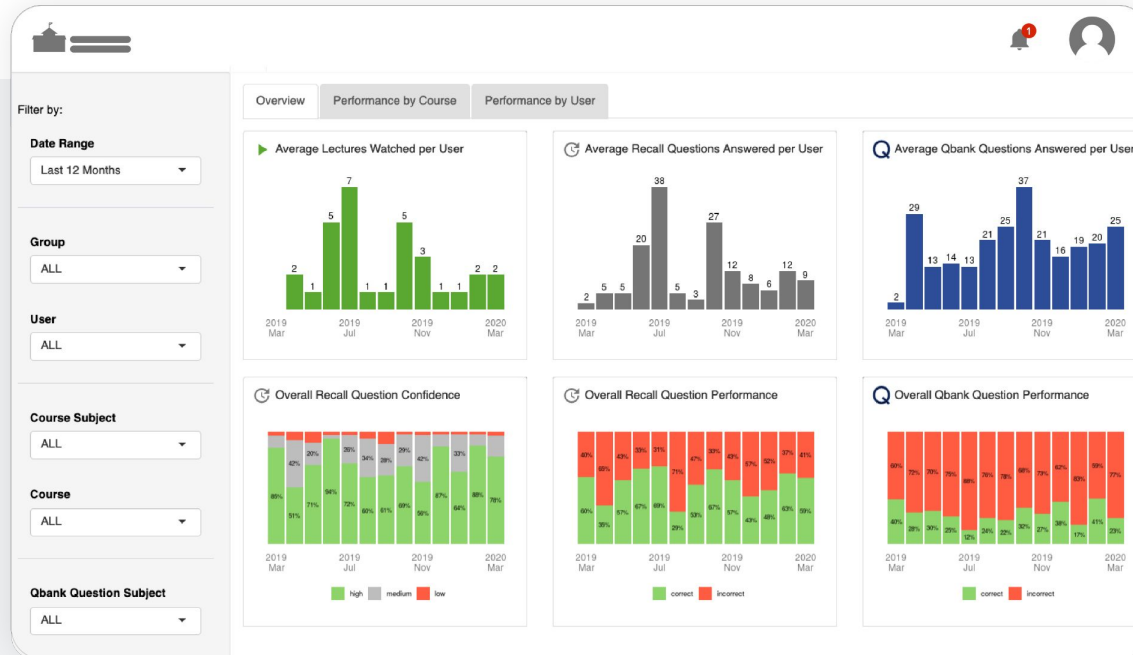
Help Focus Teaching Time on Where Students Struggle Including Typical Mistakes





# Your Teaching Dashboard

Aggregate Data With Location Drill-Down on Activity, Competence, Confidence, Over-Confidence





# Easy Integration With Your Existing Setup

## LMS / Testing



Deep Linking  
LTI SSO

Proctoring  
Integrations



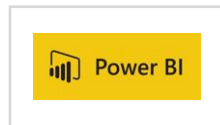
Session Prep:  
Strengths &  
Weaknesses,  
Typical Mistakes

Content &  
Recording  
Upload

## Live Teaching & Training



## Data Lake / Analytics





# What is Problem-Based Learning (PBL)?

*Definition and key principles*

# What is Problem-Based Learning?

A pedagogical approach that enables students to learn while engaging actively with meaningful problems



# What is Problem-Based Learning?

Well-established and used in:

1. Undergraduate
2. Postgraduate
3. Continuing medical education



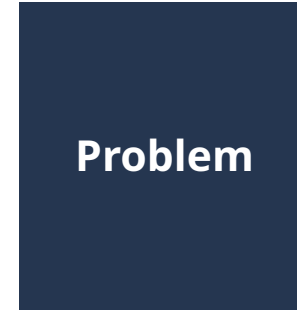
# What is Problem-Based Learning?

Facilitates learning that is:

1. Constructive
2. In context
3. Collective
4. Self-directed



# Problem-Based Learning Continuum



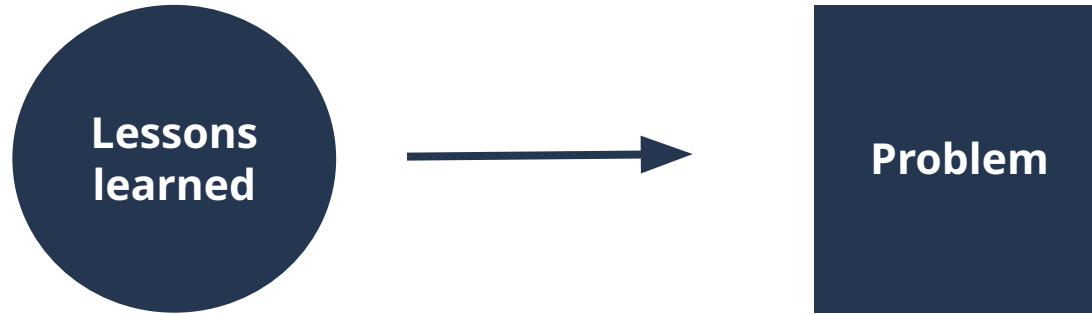


# Problem-Based Learning Continuum



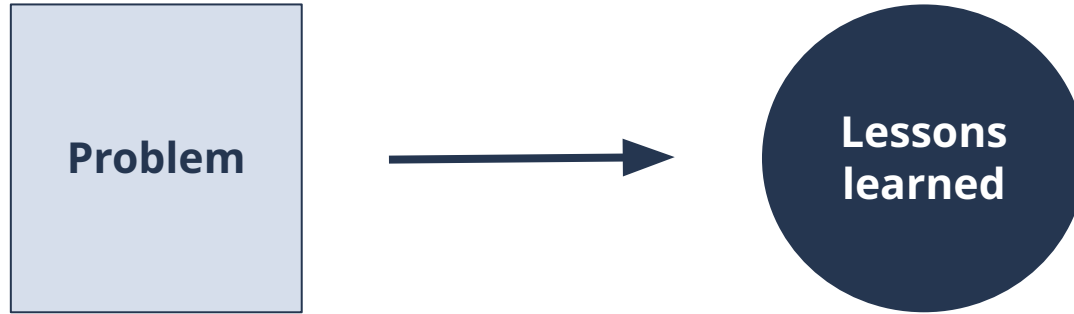
Traditional teaching

# Problem-Based Learning Continuum



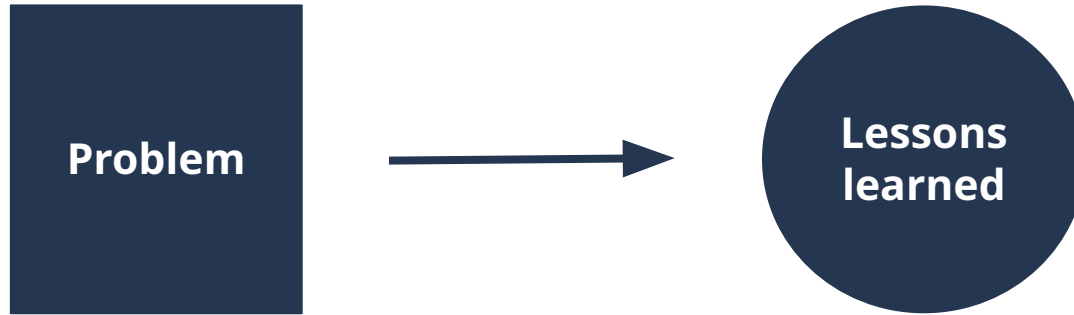
Problem-assisted learning

# Problem-Based Learning Continuum



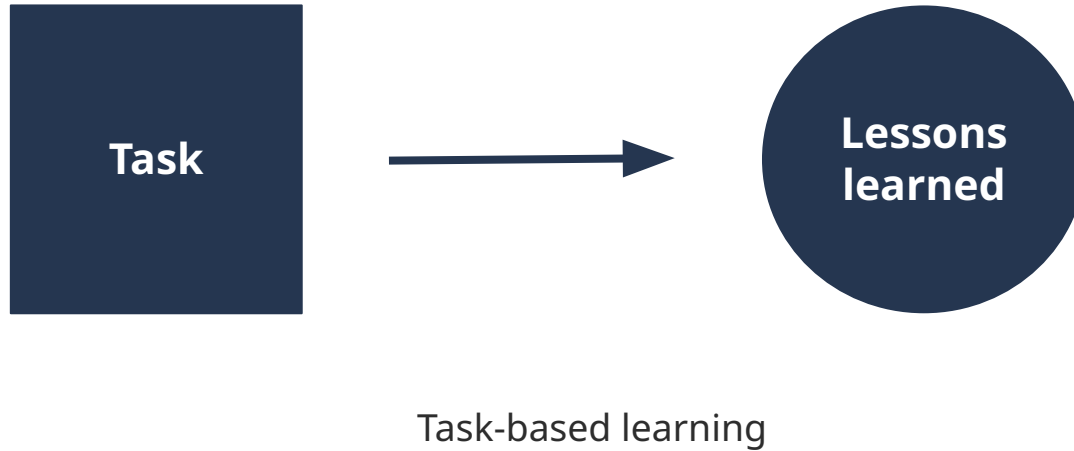
Problem-initiated learning

# Problem-Based Learning Continuum



Problem-based learning

# Problem-Based Learning Continuum



# PBL vs Traditional teaching methods

| <b>PBL</b>                          | <b>Traditional teaching methods</b>     |
|-------------------------------------|---|
| Student-centered                    | Teacher-centered                        |
| Educator is a facilitator and guide | Educator is primary source of knowledge |
| Collaborative, small-group          | Larger class sizes                      |
| Dynamic content                     | Predetermined curriculum                |
| Engaging                            | Varying levels of engagement            |

---

# PBL: Small Group Teaching

- PBL vs TBL vs CBL - small group teaching
- Short-case PBL vs Progressive-release PBL
- 'Small' group teaching?
- Active, self-directed, learning
- Role of the educator: instructor, devil's advocate, neutral chair, consultant, facilitator
- Dealing with group members



# Why use Problem-Based Learning (PBL)?

*Benefits and evidence*



# PBL vs Traditional Approaches

1

Results in better long-term knowledge retention

2

Improved clinical reasoning and performance on skill-based assessments

3

Better student satisfaction with training, clinical education, and skills development

- 
1. J. Strobel, A. van Barneveld. When is PBL more effective? A meta-synthesis of meta-analyses comparing PBL to conventional classrooms *Interdiscip J Problem-based Learn*, 3 (1) (2009), p. 4
  2. I.-S. Shin, J.-H. Kim. The effect of problem-based learning in nursing education: a meta-analysis. *Adv Health Sci Educ*, 18 (5) (2013), pp. 1103-1120
  3. K.J. Oja. Using problem-based learning in the clinical setting to improve nursing students' critical thinking: an evidence review. *J Nurs Educ*, 50 (3) (2011), pp. 145-151

# Scoping Review (2022)

| Outcome                                 | In favor of PBL | In favor of traditional methods | No difference |
|---|-----------------|---------------------------------|---------------|
| Learning and knowledge acquisition (71) | 49              | 3                               | 19            |
| Social and communication skills (5)     | 5               | 0                               | 0             |
| Student satisfaction (60)               | 51              | 2                               | 7             |
| Tutor satisfaction (15)                 | 8               | 2                               | 5             |
| Problem-solving (9)                     | 9               | 0                               | 0             |

# Acquiring useful skills

1

Communication skills: active listening, presenting, questioning, responding, clarifying, empathising

2

Team work: contributing to/collaborating with/learning from others

3

Testing and applying knowledge, constructing/defending an argument

4

Giving and receiving constructive feedback



# How to use Problem-Based Learning (PBL)

*Application and implementation*

# PBL Process: Harvard Medical School

1. Group receives the written problem scenario without the opportunity to study it beforehand
2. The student group defines the problem
3. The study group identifies the learning goals
4. Students work independently to achieve the learning outcomes
5. The group is reconvened. The students build new learning on top of prior knowledge. They review if objectives were met.
6. The group synthesizes and summarizes their work. They generalize from the specific problem to other situations

# PBL Process: Maastricht Medical School

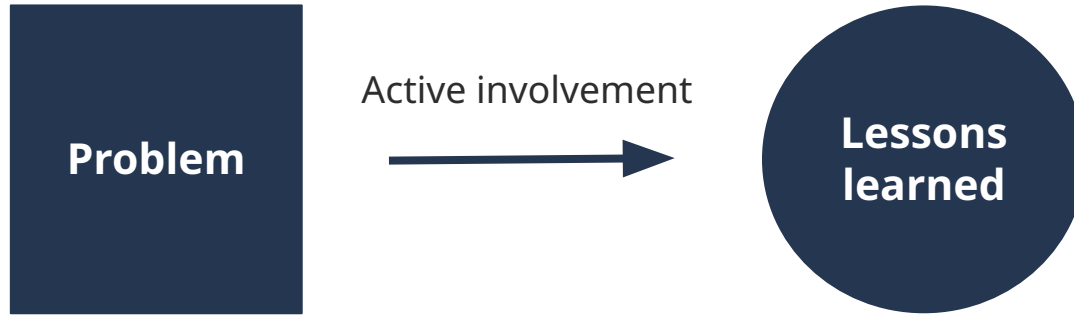
1. Students clarify the text of the problem in a group
2. Students define the problem
3. Brainstorming is used to identify explanations for phenomena observed in the scenario
4. The group reaches interim conclusions about the problem
5. The group formulates the learning objectives
6. Students work independently to achieve the learning outcomes
7. The group reconvenes to discuss the knowledge acquired

# Deciding on a PBL approach

Consider:

- Outcomes of the course - information retention vs application
- Students and staff - training and motivation
- Resources - spaces, facilitators
- Learning context - pre-clinical vs clinical?
- Importance of communication skills
- Student preferences

# PBL: The basic concept is the same





# InterPLAY Instructional Events

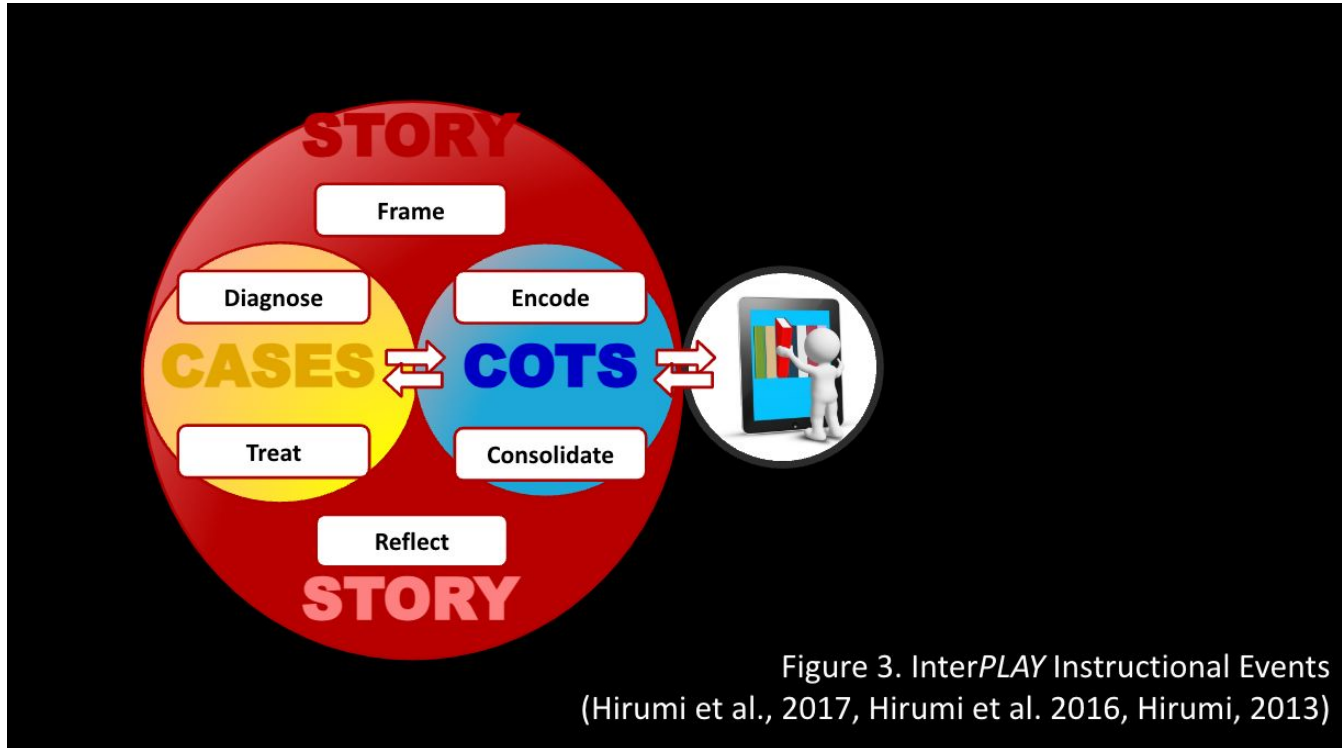


Figure 3. InterPLAY Instructional Events  
(Hirumi et al., 2017, Hirumi et al. 2016, Hirumi, 2013)



# How to optimize your PBLs

# Create Good Problems

- Consider your learning outcomes
- Consider the context and which stage of the curriculum it is in
- Ensure adequate relevance, and authenticity
- Integrate basic and clinical sciences or different disciplines
- Make sure the problem is open to allow for discussion
- Consider how the case will stimulate students' self-directed learning
- Create detailed notes for the facilitators!
- Role of AI? - with caution!

- 
1. Dolmans, D.H.J.M, Snellen-Balendong, H., Wolfhagen, I.H.A.P, & Van Der Vleuten, C.P.M. (1997). Seven principles of effective case design for a problem-based curriculum. *Medical Teacher*, 19:pp 185-189.
  2. Samy A. Azer, Ray Peterson, Anthony P. S. Guerrero & Gudrun Edgren (2012) Twelve tips for constructing problem-based learning cases, *Medical Teacher*, 34:5, 361-367, DOI: 10.3109/0142159X.2011.613500

# Involve your students!

- Ground rules
- Role allocation
- Group dynamics
- Feedback
- Monitor progress
- Critical thinking
- Collaborative learning



# Don't forget to

- Establish clear learning objectives
- Select relevant and engaging problems
- Foster effective group dynamics
- Provide adequate support and resources
- Assess both process and product





**How can Lecturio help?**

# InterPLAY Instructional Events

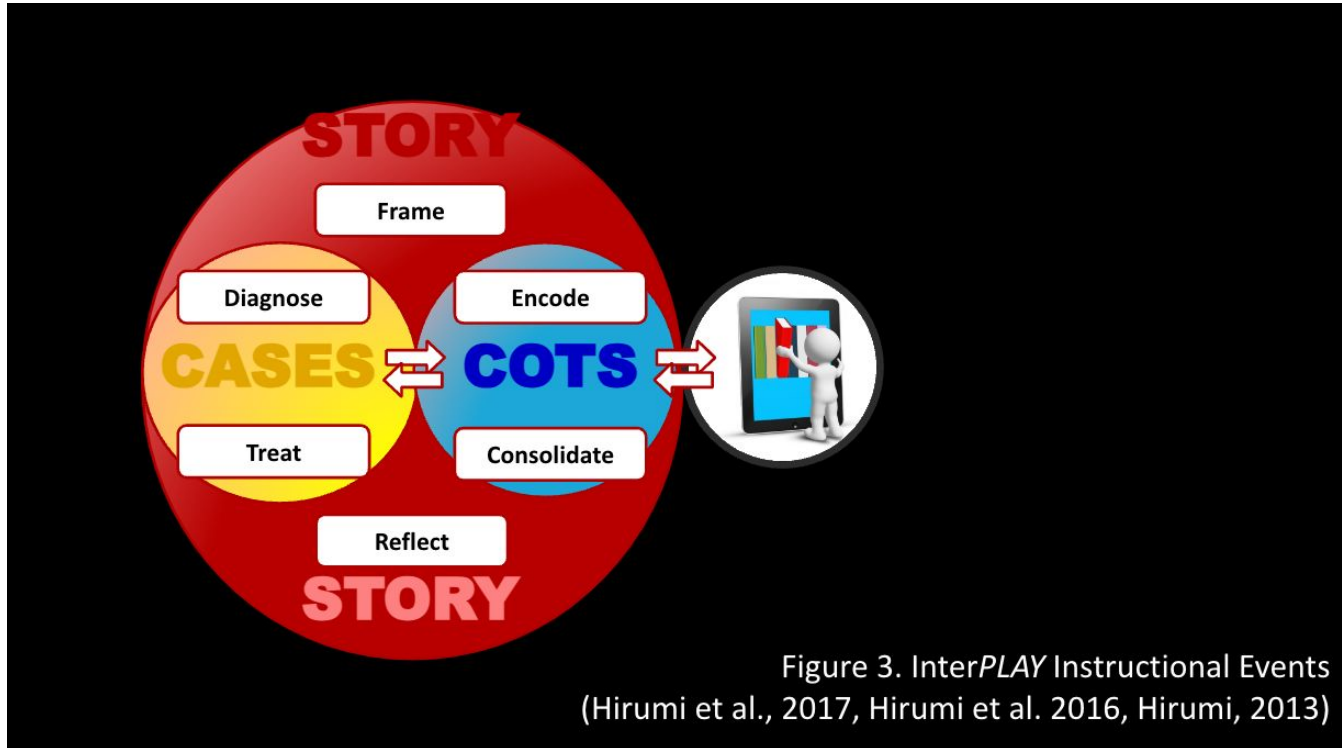
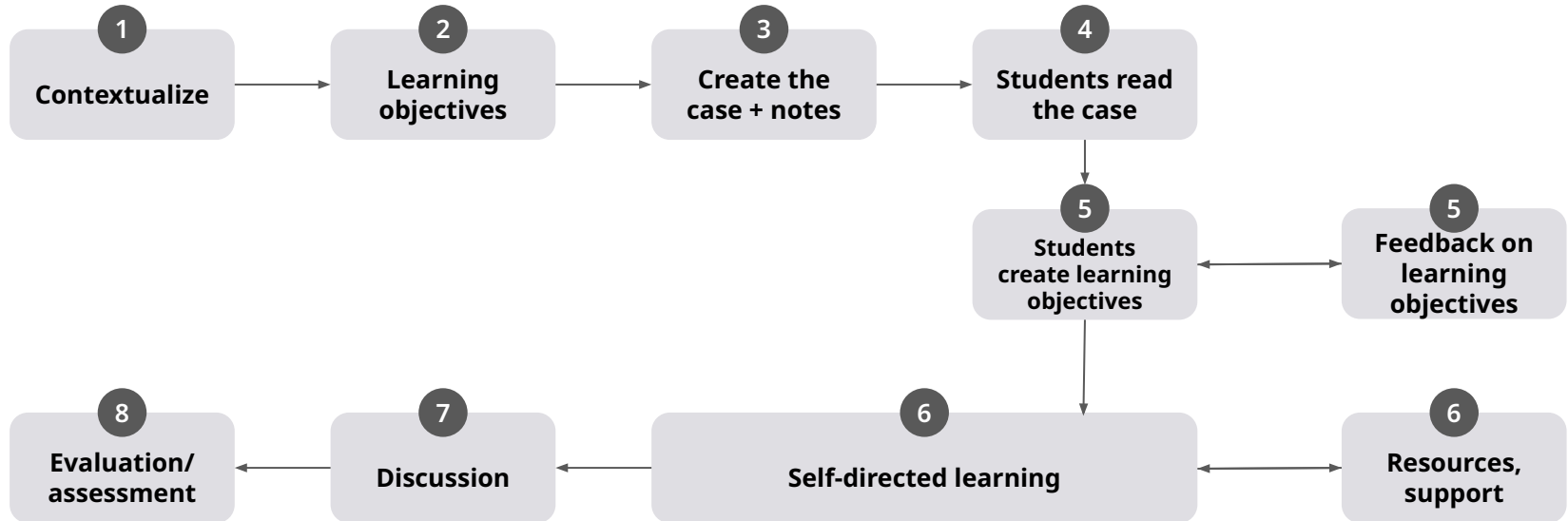


Figure 3. InterPLAY Instructional Events  
(Hirumi et al., 2017, Hirumi et al. 2016, Hirumi, 2013)

# Designing a PBL exercise with Lecturio





1

## Contextualize

# At what stage of the curriculum?

- Pre-clinical or clinical?
- What lectures/other educational activities are the students currently attending?
- What is the focus?

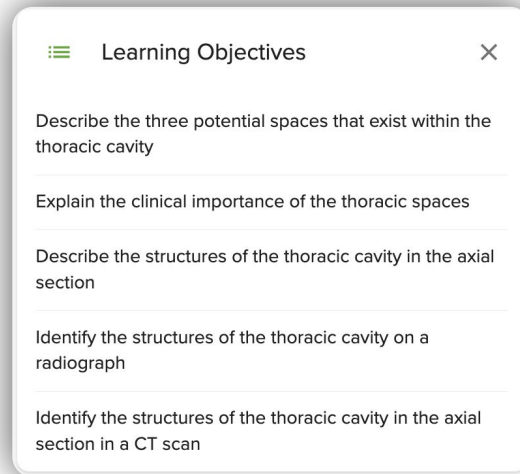
Example:

“The pediatrician conducts a thorough physical examination, noting enlarged tonsils with visible exudate and tender cervical lymph nodes. Lily's vital signs are within the normal range, except for a low-grade fever. Based on the symptoms and examination findings, the doctor suspect **tonsillitis** but consider various possible causes, including **viral or bacterial infections.**”

2

## Learning Objectives

# What are the intended outcomes?



Learning Objectives

- Describe the three potential spaces that exist within the thoracic cavity
- Explain the clinical importance of the thoracic spaces
- Describe the structures of the thoracic cavity in the axial section
- Identify the structures of the thoracic cavity on a radiograph
- Identify the structures of the thoracic cavity in the axial section in a CT scan

Lecturio's content is driven by learning objectives to help you map what resources are needed

3

**Create the case +  
notes**

# Sample Case Vignette

## Student copy

Lily is a 6-year-old girl who has been brought in by her parents, Mr. and Mrs. Johnson. Lily has been experiencing recurrent bouts of throat pain, fever, and difficulty swallowing for the past few months.

Lily's parents report that she has had multiple episodes of sore throat, each lasting a few days, over the past six months. They mention that Lily has missed school and social activities due to these recurrent infections. Mrs. Johnson notes that Lily's tonsils appear swollen and have white patches on them during these episodes. Lily's medical history includes seasonal allergies, but no other significant illnesses or surgeries.

The pediatrician conducts a thorough physical examination, noting enlarged tonsils with visible exudate and tender cervical lymph nodes. Lily's vital signs are within the normal range, except for a low-grade fever. Based on the symptoms and examination findings, the doctor suspect tonsillitis but consider various possible causes, including viral or bacterial infections.

3

**Create the case +  
notes**

**What prompts can  
you ask to  
stimulate a  
discussion?**

# Sample Case Vignette

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3

## Create the case + notes

# Sample Case Vignette

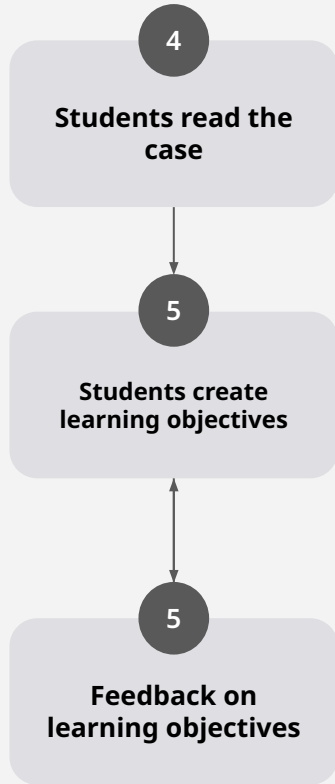
## Educator copy

Lily is a 6-year-old girl who has been brought in by her parents, Mr. and Mrs. Johnson. Lily has been experiencing recurrent bouts of throat pain, fever, and difficulty swallowing for the past few months.

[Discuss differential diagnosis]

Lily's parents report that she has had multiple episodes of sore throat, each lasting a few days, over the past six months. They mention that Lily has missed school and social activities due to these recurrent infections. Mrs. Johnson notes that Lily's tonsils appear swollen and have white patches on them during these episodes. Lily's medical history includes seasonal allergies, but no other significant illnesses or surgeries. [Discuss significance of findings]

The pediatrician conducts a thorough physical examination, noting enlarged tonsils with visible exudate and tender cervical lymph nodes. Lily's vital signs are within the normal range, except for a low-grade fever. Based on the symptoms and examination findings, the doctor suspect tonsillitis but consider various possible causes, including viral or bacterial infections. [What are other causes?]



## Audience:

Who are the learners?



## Behavior:

What will they do?



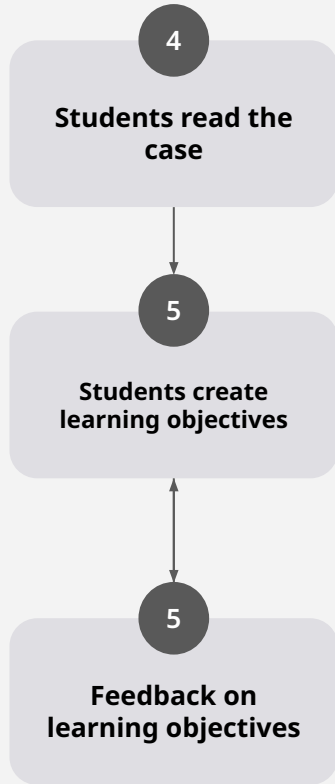
## Condition:

What are the resources, tools, or environment?



## Degree:

What determines success?



## Audience:

Who are the learners?

**Students**



## Behavior:

What will they do?

**will describe**



## Condition:

What are the resources, tools, or environment?

**how DNA probes can be used to detect specific nucleic acid sequences in clinical specimens**



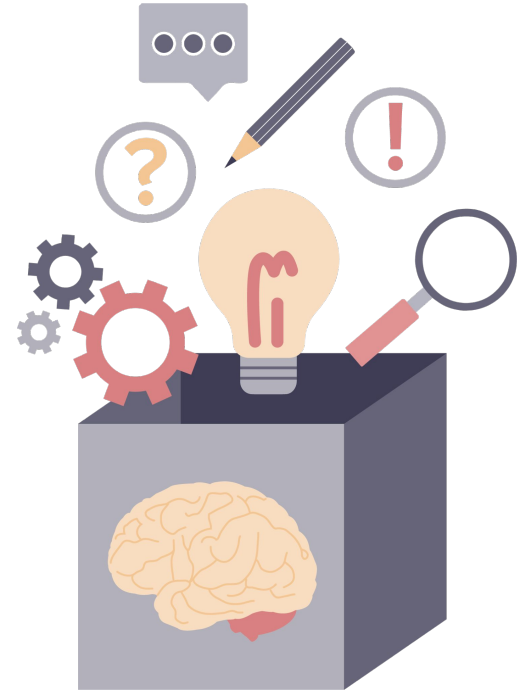
## Degree:

What determines success?

**at a level of detail sufficient for another student to complete the procedure.**

# SMART Model

- **S**- Specific
- **M**- Measurable
- **A**- Attainable
- **R**- Relevant
- **T**- Time-bound





6

## Self-directed Learning

# COTS - Lecturio Resources



**12,000+ High-End Videos**  
in TV quality, short, and engaging



**9,800+ Clinical Cases**  
with text and video explanations



**35,000+ Recall Questions**  
using a spaced repetition  
algorithm and adaptive review



**1,500+ Concept Pages**  
organized in a comprehensive library

6

## Self-directed Learning

# Lecturio Resources

## Video library

The screenshot displays a video player interface for a lecture titled "Thoracic Cavity – Lungs, mediastinum and cardiac valves" by Craig Canby, PhD. The video content shows a presenter standing next to a large anatomical diagram of the thoracic cavity. The diagram is labeled with various structures including the trachea, bronchi, lungs, heart, and mediastinum. On the left side of the video frame, there is a text overlay with the following content:

- Thoracic cavity**  
Three major compartments
- Thoracic cavity**  
Three potential spaces
- Right pleural cavity
- Left pleural cavity
- Mediastinum
- Note cardiac window

Below the video player, there is a navigation bar with an "ASSIGN" button and icons for Bookmark, 3D Model, Transcript, Objectives, Materials, Notes, and Report. To the right of the video player, there are two panels: "Learning Objectives" and "Playlist".

**Learning Objectives**

- Describe the three potential spaces that exist within the thoracic cavity
- Explain the clinical importance of the thoracic spaces
- Describe the structures of the thoracic cavity in the axial section
- Identify the structures of the thoracic cavity on a radiograph
- Identify the structures of the thoracic cavity in the axial section in a CT scan

**Playlist**  
25 videos

- Thoracic Cavity – Lungs, mediastinum and cardiac valves
- Topography of the Lungs – Lungs, mediastinum and cardiac valves

Our video library and concept notes provide a ready-to-use repository of content

6

## Self-directed Learning

# Lecturio Resources

## Concept pages

### Heart: Anatomy

The heart is a 4-chambered muscular pump made primarily of cardiac muscle tissue. The heart is divided into 4 chambers: 2 upper chambers receiving blood from the great vessels, known as the right and left atria, and 2 stronger lower chambers, known as the right and left ventricle pump blood throughout the body. Blood flows through the heart in 1 direction, moving from the right side of the heart, through the lungs, & returning to the left side of the heart, where it is pumped out to the rest of the body. As blood moves through the heart, 4 important valves backflow. The heart muscle itself is supplied by the coronary arteries. The heart also has its own conduction system, triggering its own contractions.

Last updated: March 10, 2023

0/10 questions correct [START TEST](#)

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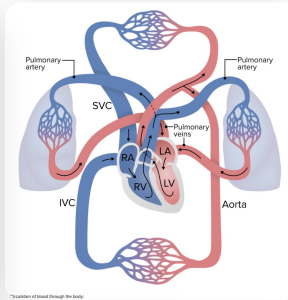
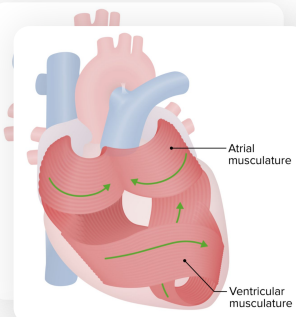
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### General Structure and Location of the Heart

#### Overview of the heart structure

The heart is a 4-chambered muscular pump made of cardiac muscle tissue.

- 4 primary muscular chambers:
  - Right atrium (RA)
  - Right ventricle (RV)
  - Left atrium (LA)
  - Left ventricle (LV)
- Connections to the great vessels:
  - Veins (bring blood back to the heart):
    - Superior and inferior vena cava (deoxygenated) → RA
    - Pulmonary veins (oxygenated) → LA
  - Arteries (carry blood away):
    - Pulmonary trunk and pulmonary arteries (deoxygenated) → from the RV
    - Aorta (oxygenated) → from the LV



### Related videos



Cardiovascular System – Anatomy of the Heart



Components of the Heart – Anatomy of the Heart



Surface Anatomy of the Heart – Heart (Cor)

6

## Self-directed Learning

# Lecturio Resources

## Learning Paths

The screenshot shows the 'MD - Board Exams' section of the Lecturio Learning Paths interface. At the top, there are navigation tabs: 'All' (selected), 'MD - Board Exams', 'MD - Subject Exams', 'DO - Subject Exams', and 'PA - End of Rotation Exams'. Below the tabs, the title 'MD - Board Exams' is displayed. The main content area consists of a 2x3 grid of resource cards. Each card features an icon, a title, and an 'ADD TO STUDY PLANNER' button. The cards are: 1. 'USMLE Step 1 Schedule (40 days)' with a calendar icon showing '40'. 2. 'USMLE Step 1 Practice Exams' with a clipboard icon. 3. 'USMLE Step 1 Self-Assessment' with a clipboard icon. 4. 'USMLE Step 2 Self-Assessment' with a clipboard icon. 5. 'USMLE Step 2 Schedule (40 days)' with a calendar icon showing '40'. 6. 'USMLE Step 1 Schedule (99 days)' with a calendar icon showing '99'.

| Resource Title                  | Icon Description           | Action               |
|---------------------------------|----------------------------|----------------------|
| USMLE Step 1 Schedule (40 days) | Calendar icon with '40'    | ADD TO STUDY PLANNER |
| USMLE Step 1 Practice Exams     | Clipboard icon with pencil | ADD TO STUDY PLANNER |
| USMLE Step 1 Self-Assessment    | Clipboard icon with pencil | ADD TO STUDY PLANNER |
| USMLE Step 2 Self-Assessment    | Clipboard icon with pencil | ADD TO STUDY PLANNER |
| USMLE Step 2 Schedule (40 days) | Calendar icon with '40'    | ADD TO STUDY PLANNER |
| USMLE Step 1 Schedule (99 days) | Calendar icon with '99'    | ADD TO STUDY PLANNER |

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## Self-directed Learning

# Lecturio Resources

## Course Mapping

Pre-Medical / Generic

Pre-Medical / MCAT

Pre-Medical / NEET-UG

Pre-Clinical / Generic

Pre-Clinical / USMLE Step 1

Pre-Clinical / COMLEX Level 1

Clinical / Generic

Clinical / USMLE Step 2

Clinical / COMLEX Level 2

Clinical / NEET-PG

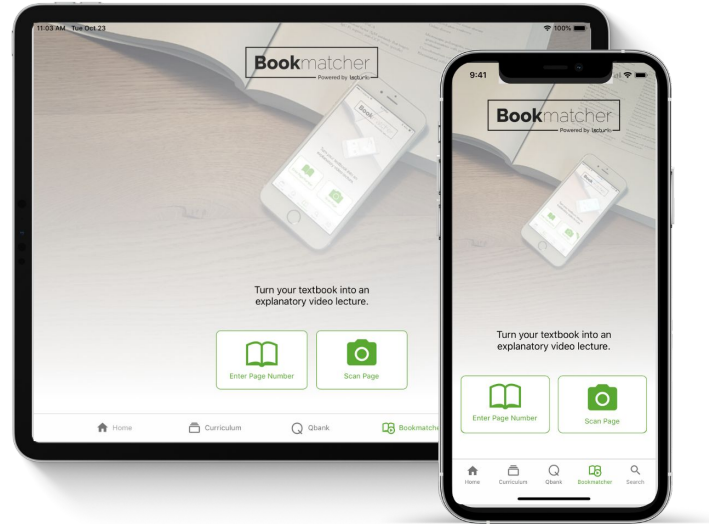
Lecturio course mapping can take the burden off of educators by curating content into courses that fit your curriculum and plans.

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## Self-directed Learning

# Lecturio Resources

Desktop and App access



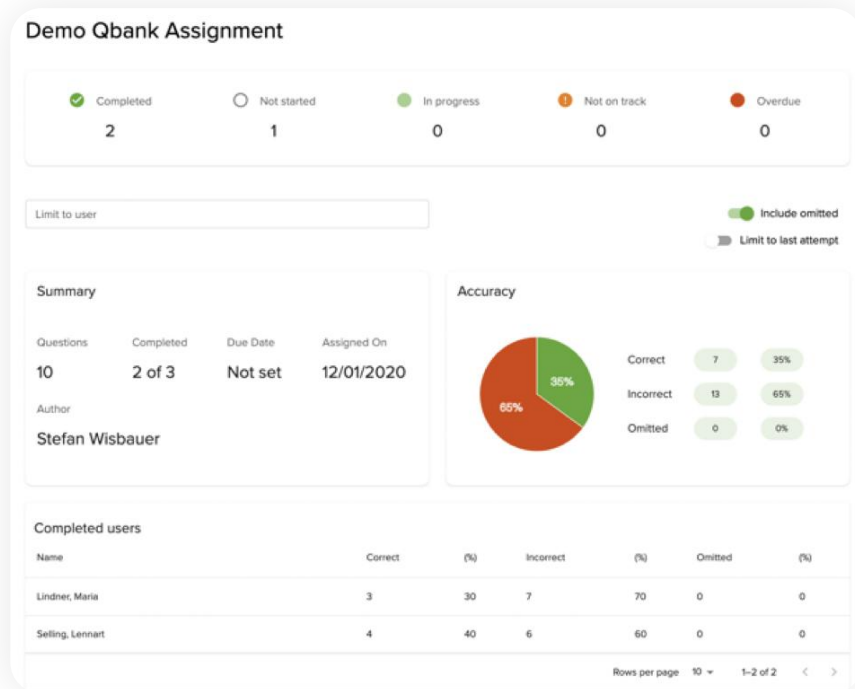
The Lecturio web app and mobile app can be some of the technological tools that teachers include as part of their instructional approach.

6

## (Directed?) Self-directed Learning

# Lecturio Resources

## Assignments



6

## Self-directed Learning

# Lecturio Resources

## Study Planner

|    |  |
|----|--|
| Qb | Qbank Test Assignment 08/21/2019<br><small>(Due: Aug 24, 2019 11:59 PM)</small> Assigned by: Thiemo Weiser 7 questions |
| Q  | Qbank Test Assignment 07/04/2019<br><small>(Due: Jul 6, 2019 11:59 PM)</small> Assigned by: Thiemo Weiser 8 questions  |
| ≡  | Clinical Neurology<br><small>(Due: Mar 10, 2022 11:59 PM)</small> 30:23 h  |
| ≡  | Histology: Human Organ Systems<br><small>(Due: Mar 5, 2022 11:59 PM)</small> 10:55 h                                   |
| ≡  | Emergency Medicine<br><small>(Due: Mar 3, 2022 11:59 PM)</small> 18:57 h   |
| ≡  | Family Medicine<br>Learning Path   |
| ≡  | Thoracic Viscera<br>2:59 h <span>38% ●</span>  |
| ≡  | Trauma (Emergency Medicine)<br>2:58 h <span>18% ●</span>   |

Study time needed per day



### Study Planner

3 assignments, 22 personal tasks

Filter by state

Only active

Sort by

Status

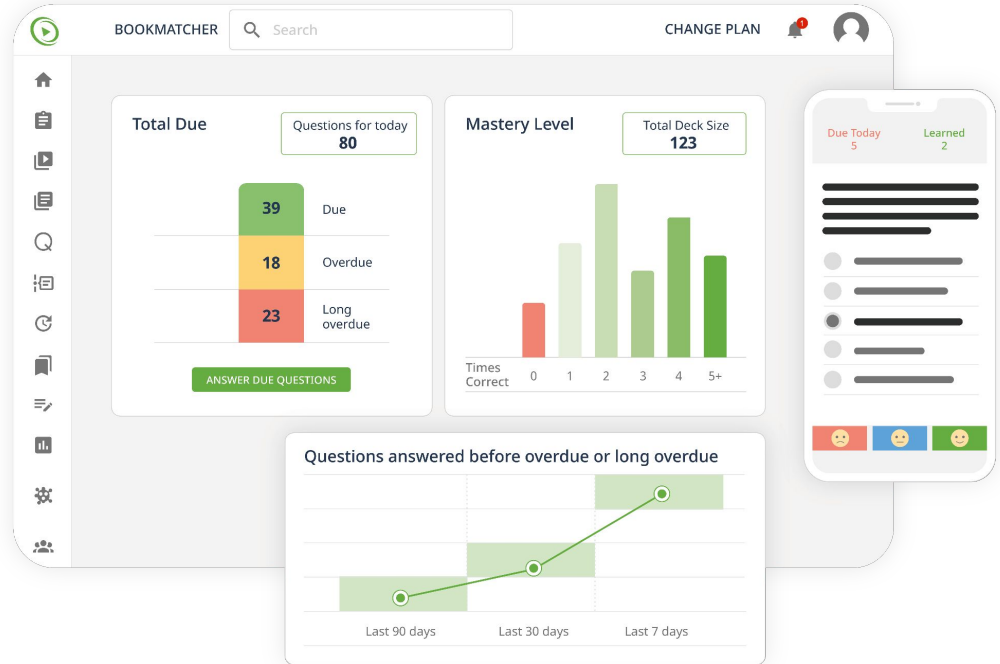


# Lecturio Resources

## Spaced Retrieval

6

Self-directed  
Learning



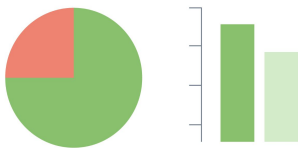
6

## Self-directed Learning

# Lecturio Resources

## Adaptive Review

### Performance Analysis



| <input type="checkbox"/>            | Name       | Correct | Accuracy |
|-------------------------------------|------------|---------|----------|
| <input checked="" type="checkbox"/> | ██████████ | 20/100  | 20%      |
| <input checked="" type="checkbox"/> | ██████████ | 98/100  | 98%      |
| <input checked="" type="checkbox"/> | ██████     | 5/100   | 5%       |

### Subjects

[START ADAPTIVE REVIEW](#)

| Course       | Answered | Completion | Correct | Accuracy |
|--------------|----------|------------|---------|----------|
| Biochemistry | 4/4      | 100%       | 2/4     | 50%      |
| Histology    | 6/6      | 100%       | 6/6     | 100%     |

### System

[START ADAPTIVE REVIEW](#)

| Course                | Answered | Completion | Correct | Accuracy |
|-----------------------|----------|------------|---------|----------|
| Cardiovascular System | 3/3      | 100%       | 1/3     | 33%      |
| Nervous System        | 4/4      | 100%       | 3/4     | 75%      |

8

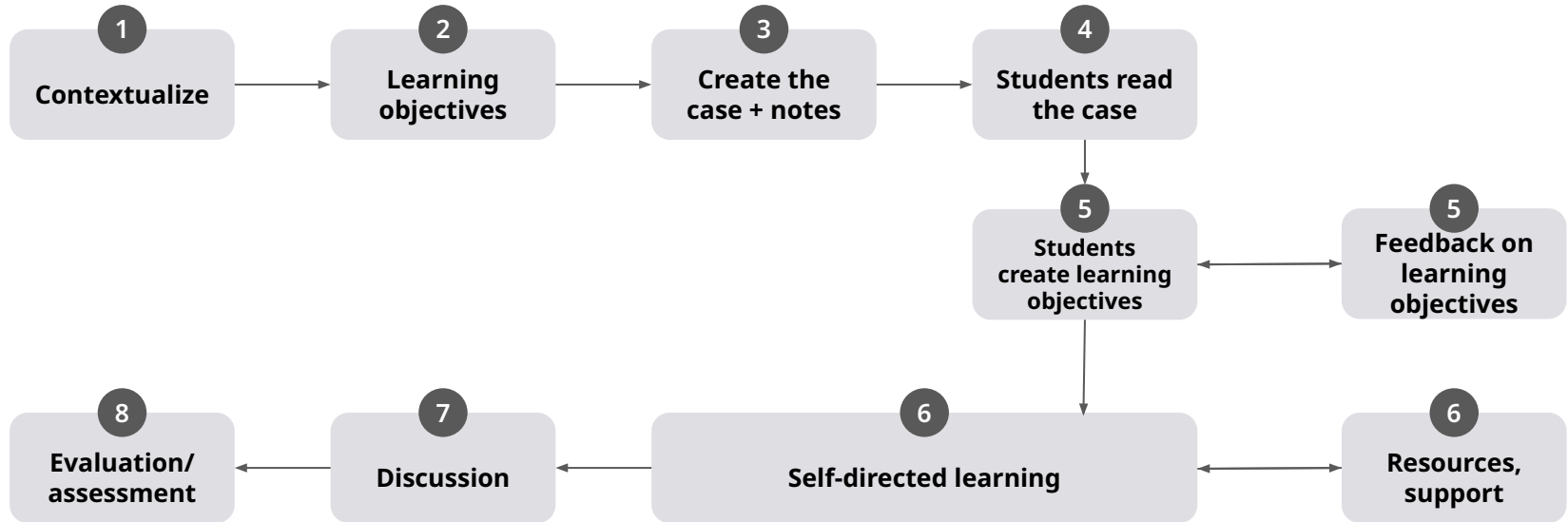
## Evaluation/ Assessment

# Lecturio Resources Question Bank

The screenshot displays the Lecturio Question Bank interface. On the left, a vertical list of question numbers (1-33) is visible, with question 32 highlighted. The main content area shows a question titled "Cardiac muscle serves many necessary functions and it has a specific structure that serves these functions. The structure highlighted is an important histologic component of cardiac muscle. What would be the outcome if this structure diffusely failed to function?". Below the text is a list of five multiple-choice options (A-E). To the right of the text is a histology image of cardiac muscle with a white box highlighting a specific structure. Below the image is a small caption: "Image by Dr. S. Glod, Anton Becker, License: CC BY 2.5". At the bottom of the question area is a "Submit answer and show explanation" button. On the right side of the interface, there is a question editor panel with a "Due today" indicator, a "Learned 0" counter, and a "REMOVE QUESTION" button. Below the question editor is a list of radio button options: "Pulmonary arteries", "Bronchial lumen", "Chest wall", "Decending aorta", and "Heart". At the bottom of the interface, there is a "Lecturio" logo, a "Feedback" button, an "End" button, and three colored buttons (red, blue, green) with smiley face icons.

Qbank and Quiz Questions repository can act as springboard for educators to align assessments from. Pre-mapped Qbank helps take burden off of educators.

# Designing a PBL exercise with Lecturio





## Today's Agenda

1

Introduction to Lecturio

2

What is Problem-Based Learning (PBL)?

3

Why use PBL?

4

How to use PBL

5

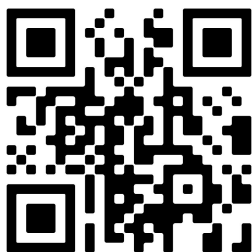
How Lecturio can support

# Let's Teach

*Evidence-Based Medicine in an  
Evidence-Based Manner*

Request a demo:

[institutions@lecturio.com](mailto:institutions@lecturio.com)  
[www.lecturio.com](http://www.lecturio.com)



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