

Renewing the Curriculum to More Effectively Accommodate Clinical Rotation: An ALTC Priority Program Project

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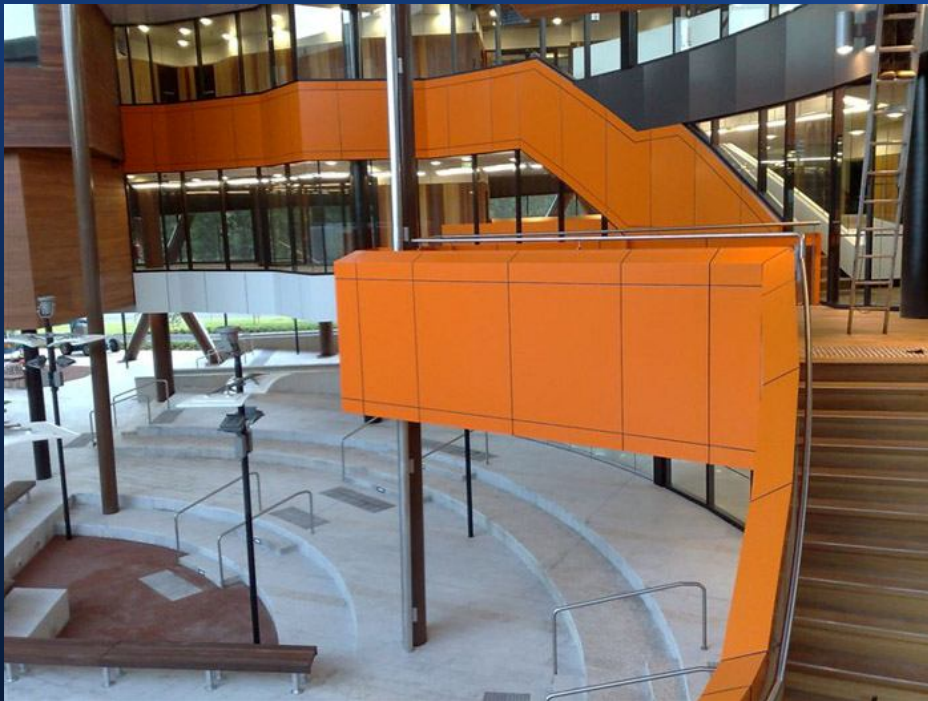
**Bronwen Dalziel
University of Western Sydney**

UWS Medicine



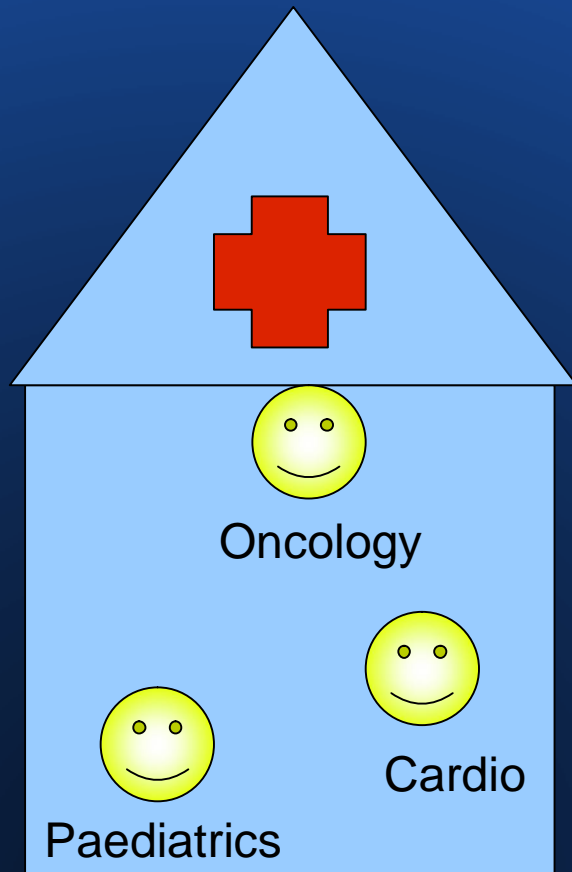
- 1st students start 2007
- 100-120 per year
- 5 year course
- Undergraduate
- Greater Western Sydney

Years 1 and 2



- Problem based learning tutorials
- Highly integrated with lectures – basic sciences
- Some clinical exposure

Years 3 to 5

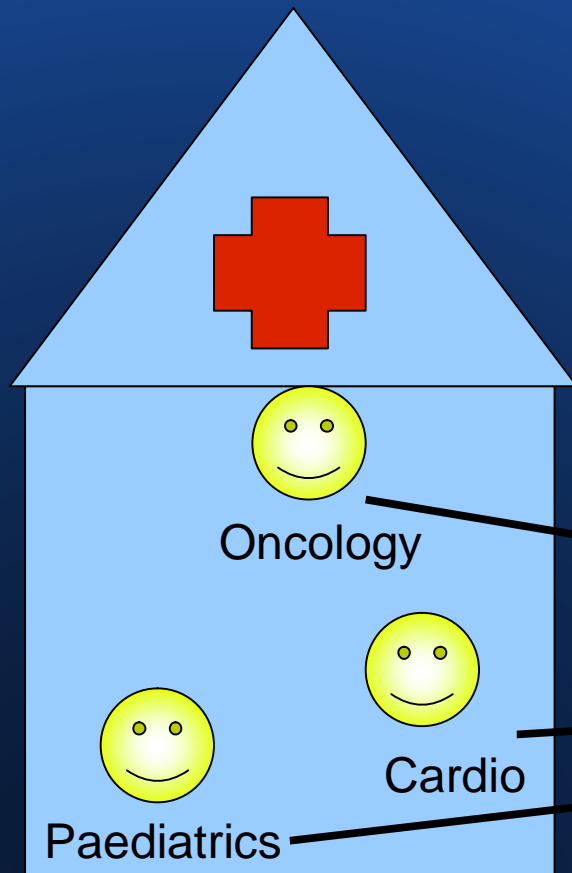


Clinical Placement in Hospital

University



Years 3 to 5



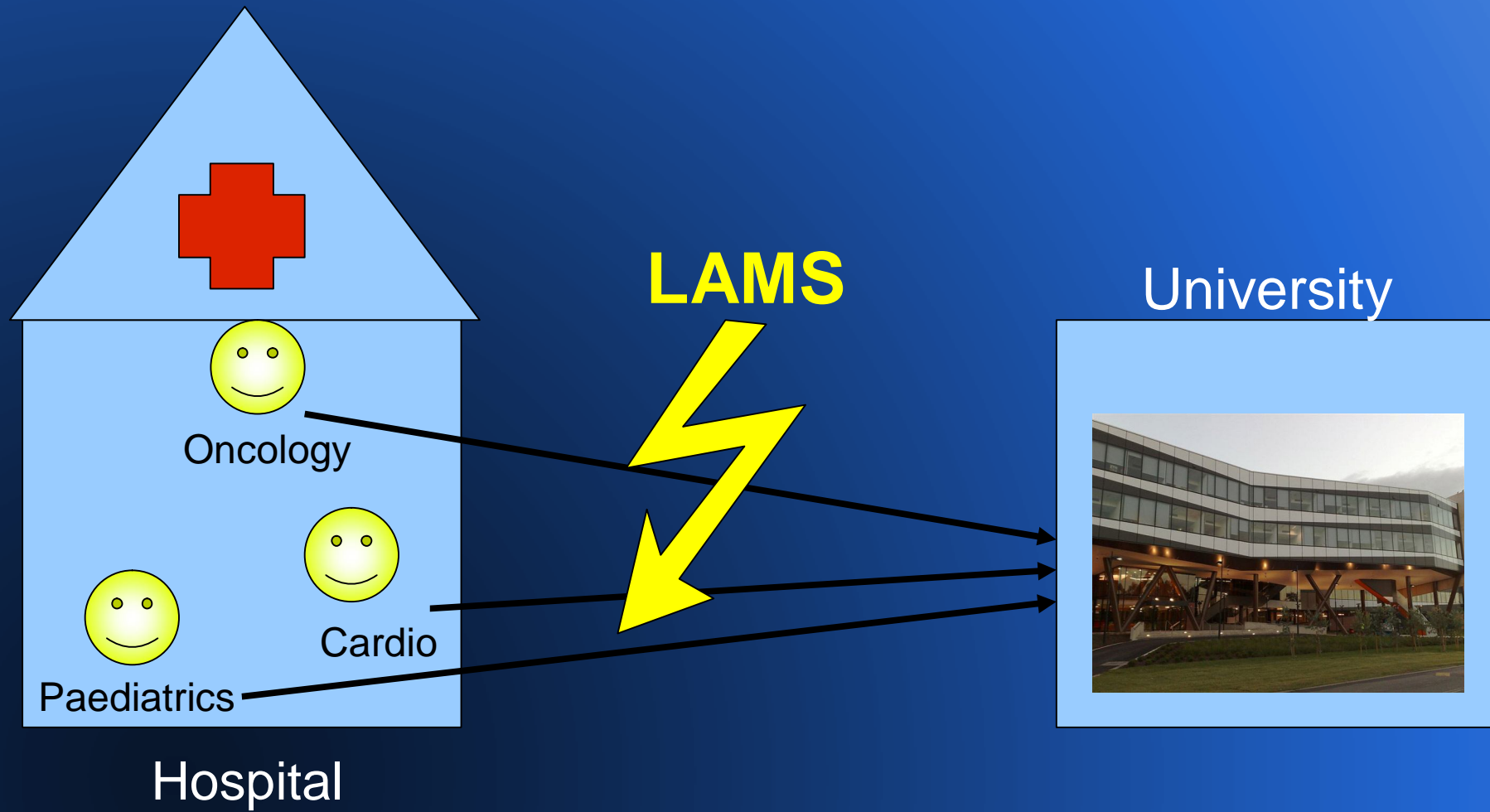
Hospital

University

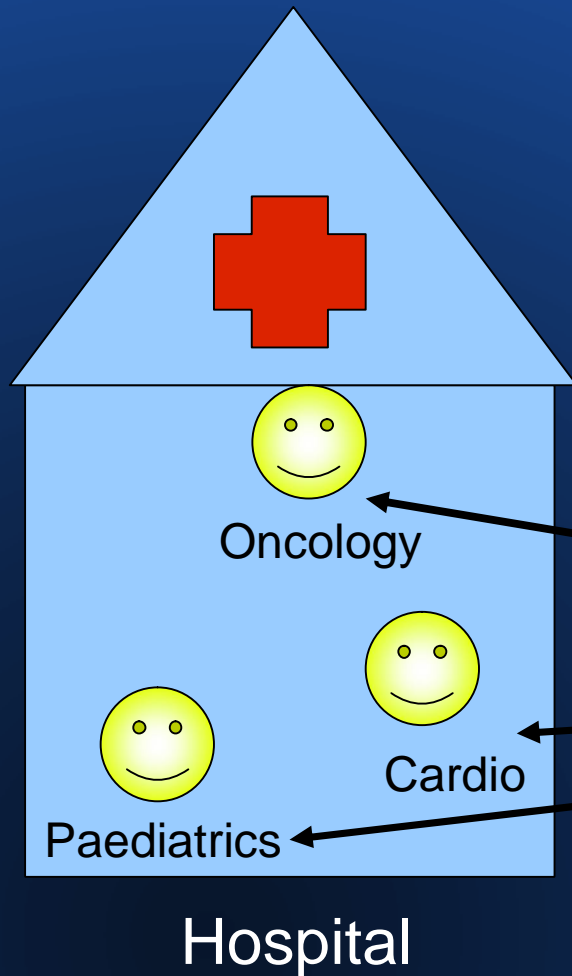


Infectious diseases lecture

Years 3 to 5



Years 3 to 5



LAMS online modules

9 Streams of Scientific
Basis of Medicine
(25hrs each)

e.g. Cardiovascular
Disease and Risk,
Oncology, Immunology

ALTC project

- What is considered “best practice” for the teaching of the scientific basis of medicine within the field of medical education?
- What learning designs can be readily adopted by the Faculty of Medicine as a means of delivering best practice?
- How can the curriculum be delivered to facilitate students’ learning in relevant and connected ways when they are out on clinical rotation?
- What learning designs can be readily adopted by other disciplines as templates for best practice?
- How can identified barriers to academics’ adoption, adaptation and reuse of learning designs be overcome to ensure sustainability?

Best Practice

- Problem based learning – tutorial setting
 - Case presentation
 - Students attempt initial diagnosis
 - More case detail presented
 - Students collect information in topic
 - Students connect learning to case for a final diagnosis
 - Sometimes proceed with treatment

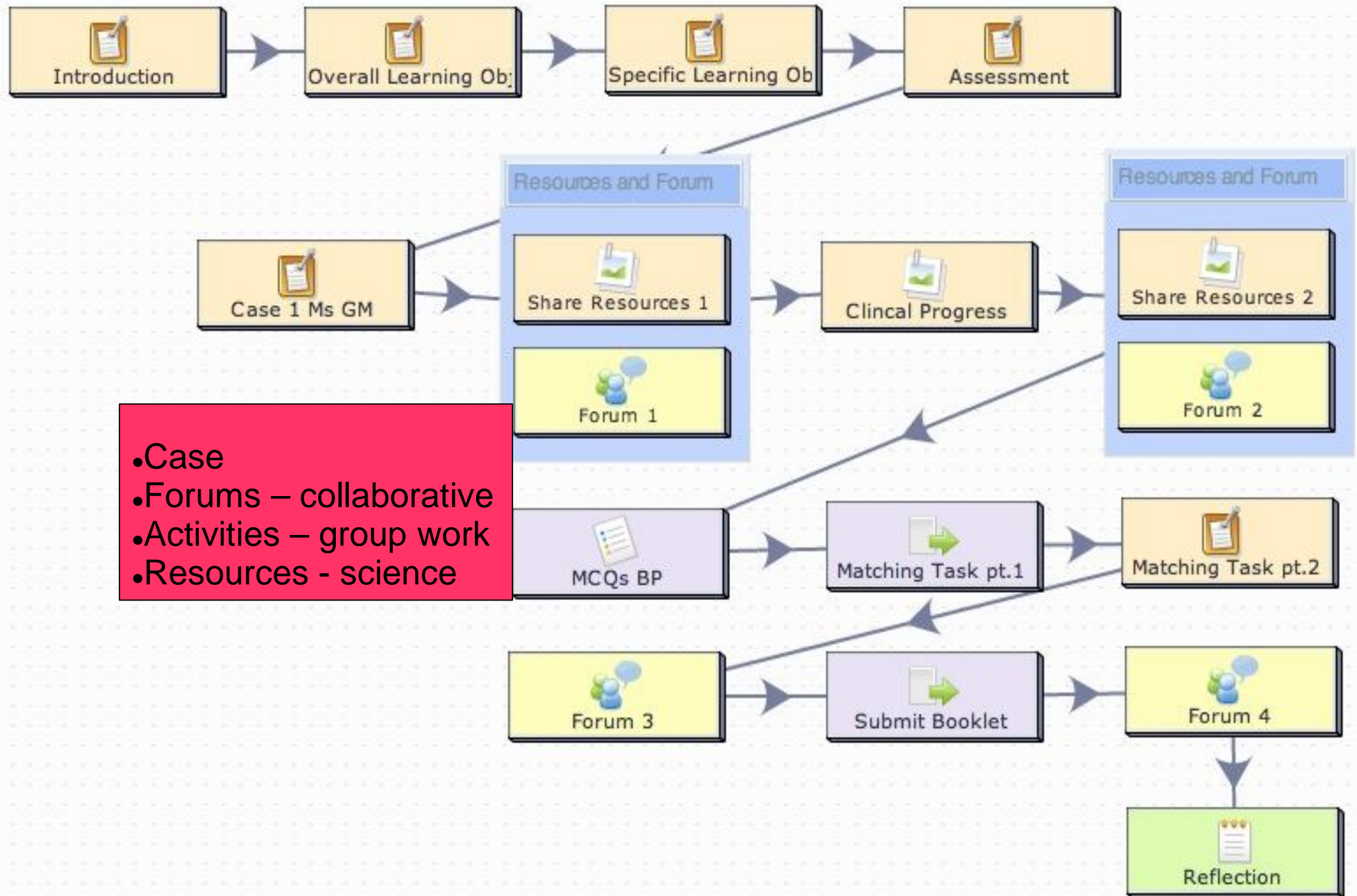
What Learning Designs

- Level of learning design
 - PBL theory
 - LAMS authoring environment 5 hrs or 25 hrs
- Number of learning designs
 - 9 modules x 25 hrs = eLearning fatigue
 - 8 – 10 learning designs to suit different teaching styles
- Presentation – guided or prescribed

Current modules

- 3 modules for 2008 (3rd year students)
- Content experts using PBL theory, but not using Learning Design templates
- 3 different styles of module emerging

Cardiovascular Disease and Risk – Case 1



MCQs BP

Matching Task pt.1

Matching Task pt.2

Forum 3

Submit Booklet

Forum 4

Notebook

Title

View All

Save

Done

Matching Task Part 1 - BP Meds Exercise

Antihypertensive Medications

Instructions

Drug	Class	Effect	Side effect
Amlodipine	Calcium channel blocker	Decreases peripheral vascular resistance	Headache, dizziness, swelling
Atenolol	Beta blocker	Decreases heart rate and blood pressure	Bradycardia, fatigue, cold hands
Captopril	ACE inhibitor	Decreases blood pressure by relaxing blood vessels	Dizziness, cough, taste changes
Furosemide	Loop diuretic	Increases urine output, decreases blood volume	Dehydration, electrolyte imbalance
Lisinopril	ACE inhibitor	Decreases blood pressure by relaxing blood vessels	Dizziness, cough, taste changes
Nifedipine	Calcium channel blocker	Decreases peripheral vascular resistance	Headache, dizziness, swelling
Verapamil	Calcium channel blocker	Decreases heart rate and blood pressure	Bradycardia, constipation, swelling
Hydrochlorothiazide	Thiazide diuretic	Increases urine output, decreases blood volume	Dehydration, electrolyte imbalance
Ramipril	ACE inhibitor	Decreases blood pressure by relaxing blood vessels	Dizziness, cough, taste changes
Enalapril	ACE inhibitor	Decreases blood pressure by relaxing blood vessels	Dizziness, cough, taste changes
Losartan	Angiotensin II receptor antagonist	Decreases blood pressure by relaxing blood vessels	Dizziness, fatigue
Spironolone	Potassium-sparing diuretic	Increases urine output, decreases blood volume	Hyperkalemia, gynecomastia

Click on the image above

1. Complete the Antihypertensive Medications table by clicking on the image to download and open the spreadsheet. Click on the 'maximize' window icon at the top right hand corner of the screen to enlarge the table.
2. Click on the blue **Answers** tab located at the bottom of the screen in the second worksheet.
3. The answers are scrambled, and it is your task to find the correct match for each of the medications listed. Find their:
 - ~ Class
 - ~ Effect
 - ~ Side effect [use the drug **ramipril** as an example]
4. Cut or copy the answers from the '**Answers**' worksheet and paste into the main worksheet table '**BP Meds**'.
5. After you have completed the spreadsheet, save your file to your computer local drive, filename: "**Surname_Student ID**".
6. Use the facility below to upload your file.
7. Now you can move to the next activity where you can view the model answers to see if you were correct.



Note: After you click on "Next Activity" and you come back to this Submit Files, you won't be able to continue adding files.

No files have been uploaded yet.

Matching Task pt.1

Matching Task pt.2

Forum 3

Submit Booklet

Forum 4

Reflection

Title

View All

Save

Done

Patient Information Brochure

 Submit Files

Design a patient information booklet about the benefits and risks of treatment for Hypertension.

This work can be done in a group with other students (max 3).

You could use the [attached information guide](#) given to pregnant women as an example of the type of booklet patients might normally be given.

Upload your file below

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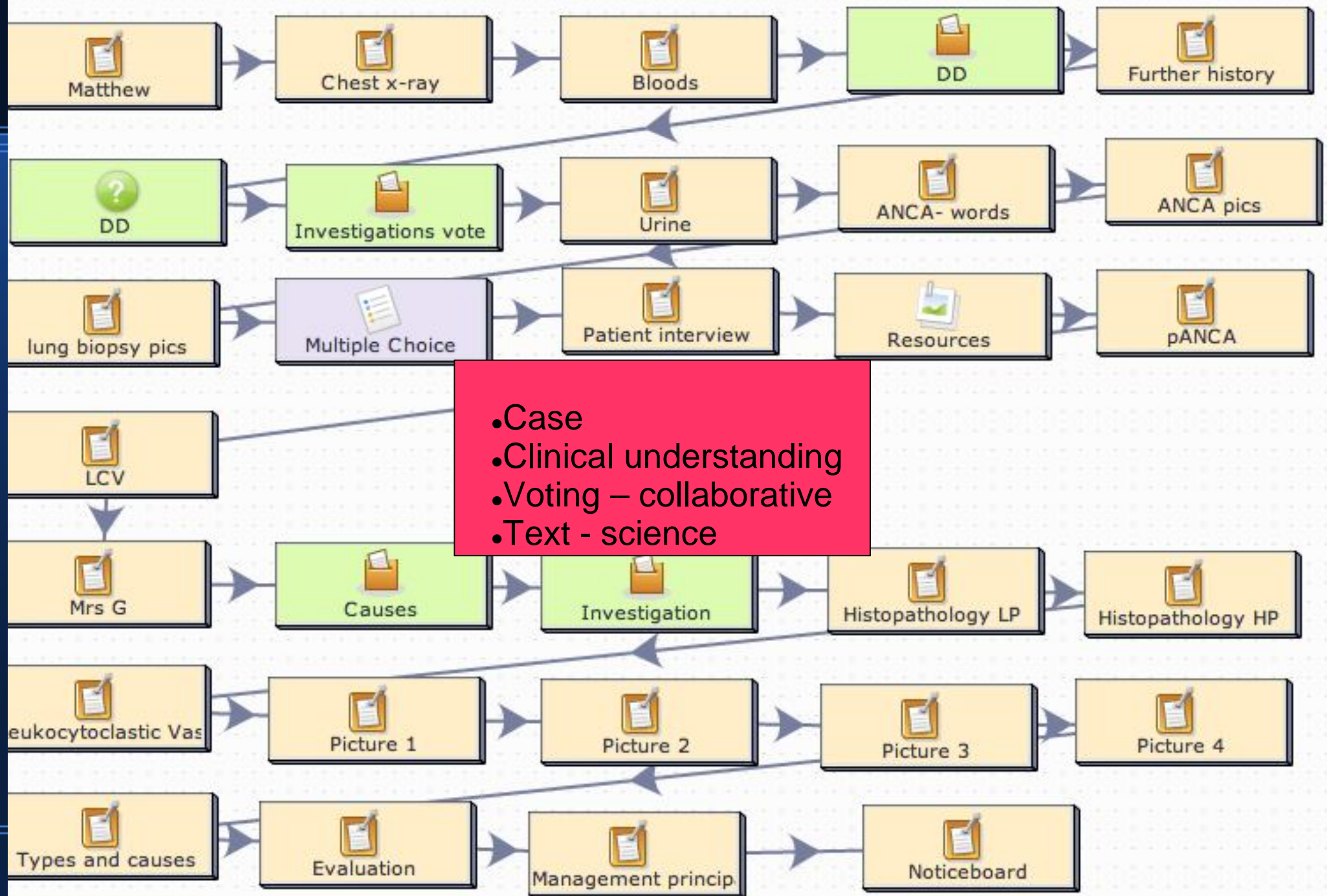
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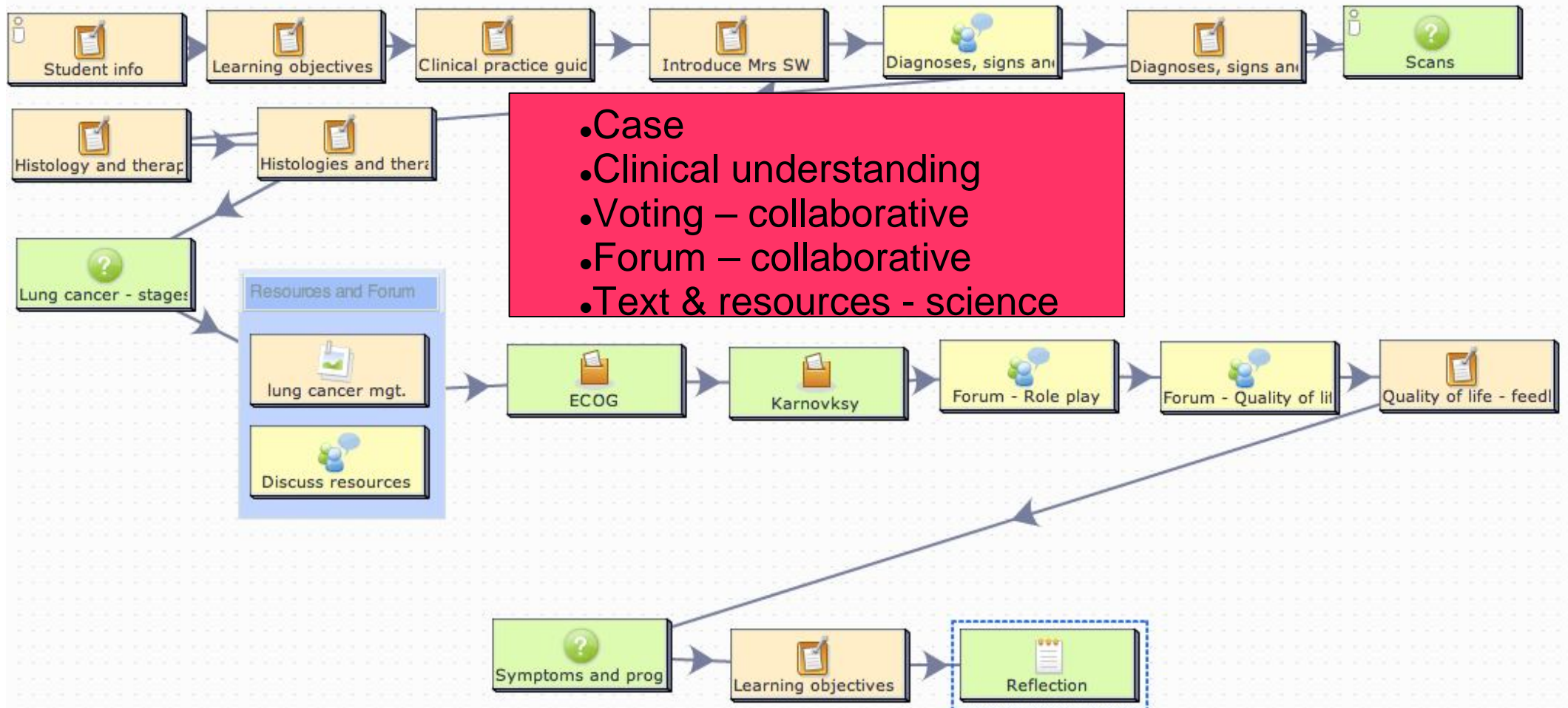
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Next Activity

Immunology – Case 1



Oncology – Case 1



Future

- Collect student feedback about current modules
- Create 8-10 learning designs (based on lessons learned and to suit teaching styles)
- Create a process for how how LAMS team relates to content experts
- Release learning designs to others