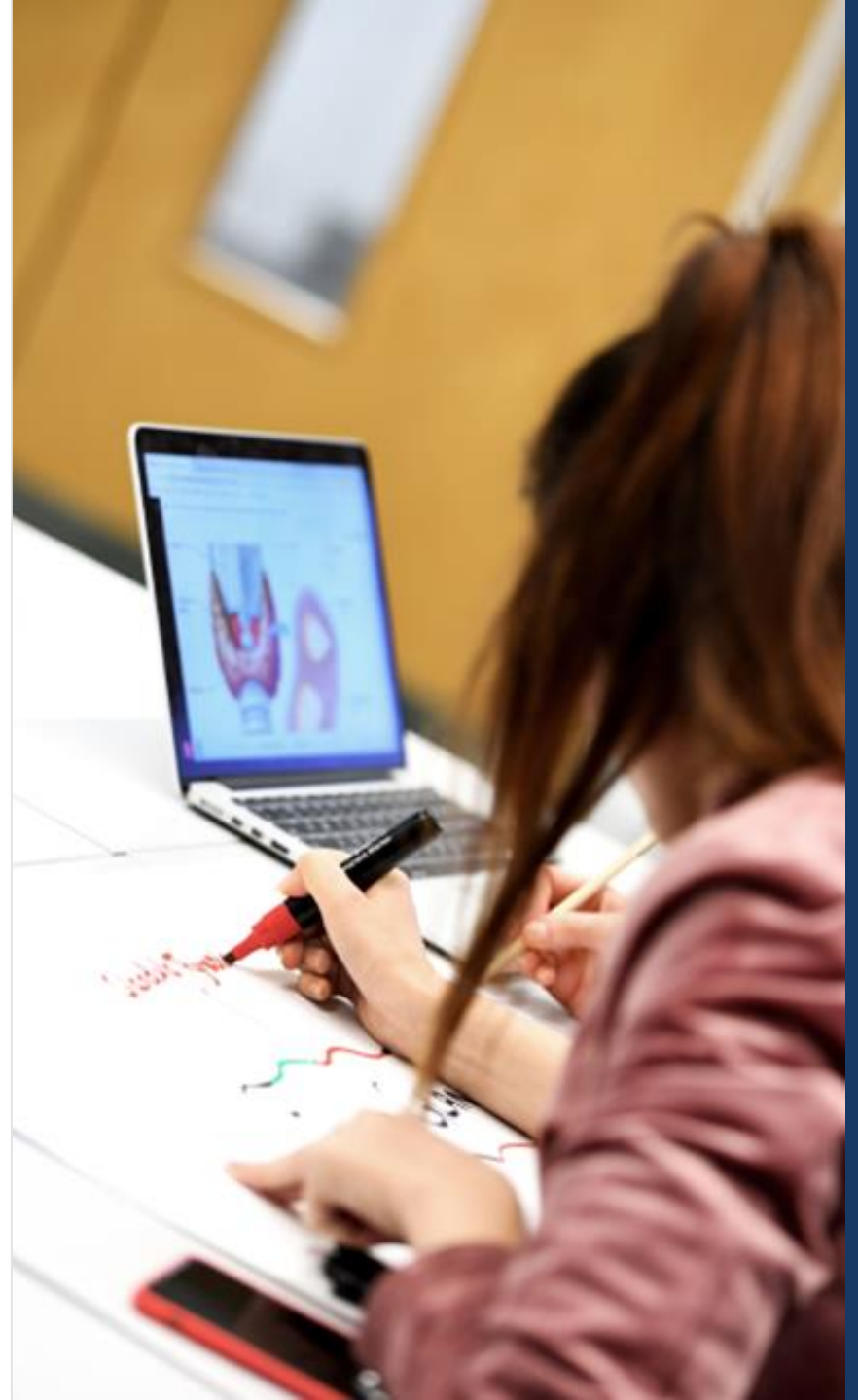


Using digital learning platforms in teaching: Three case studies

Astrid Ferreira, Dr Oliver Gibson, Joanne McPhie and Dr Sabrina Tosi

With student contribution from

Oliver Britten, Caitlin Champion and Lynn Gable

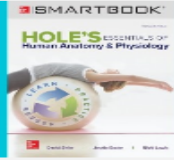


Today's workshop

- Brief explanation of the Connect platform
- Hands on activity
- Staff experiences
 - Biomedical Sciences
 - Occupational Therapy
 - Sport, Health and Exercise Sciences
- The student view
- Conclusions

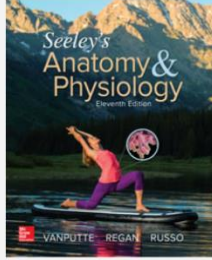
The Connect platform

SMARTBOOK eBook




Shier, Hole's Essentials of Human Anatomy and Physiology 13e (SmartBook)
David Shier, 13e

eBook




Seeley's Anatomy & Physiology
Cinnamon VanPutte, 11e

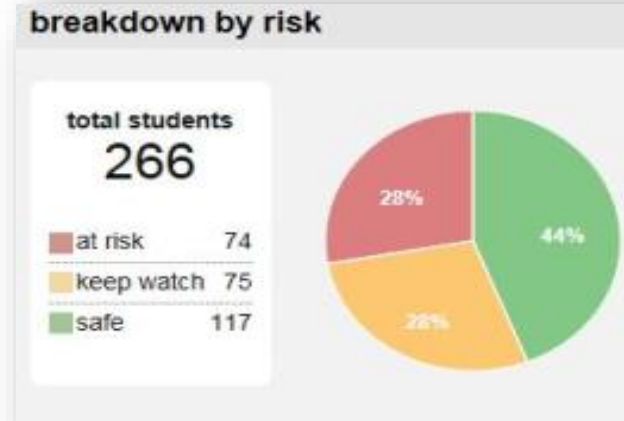
LS Chapter 9. Nervous System	 none-11/23/17			
LS Chapter 10. The Senses	 none-12/14/17			
LS Chapter 12. Blood	 none-02/02/18			

 **cadaver dissection tool**
Launch Anatomy & Physiology Revealed >

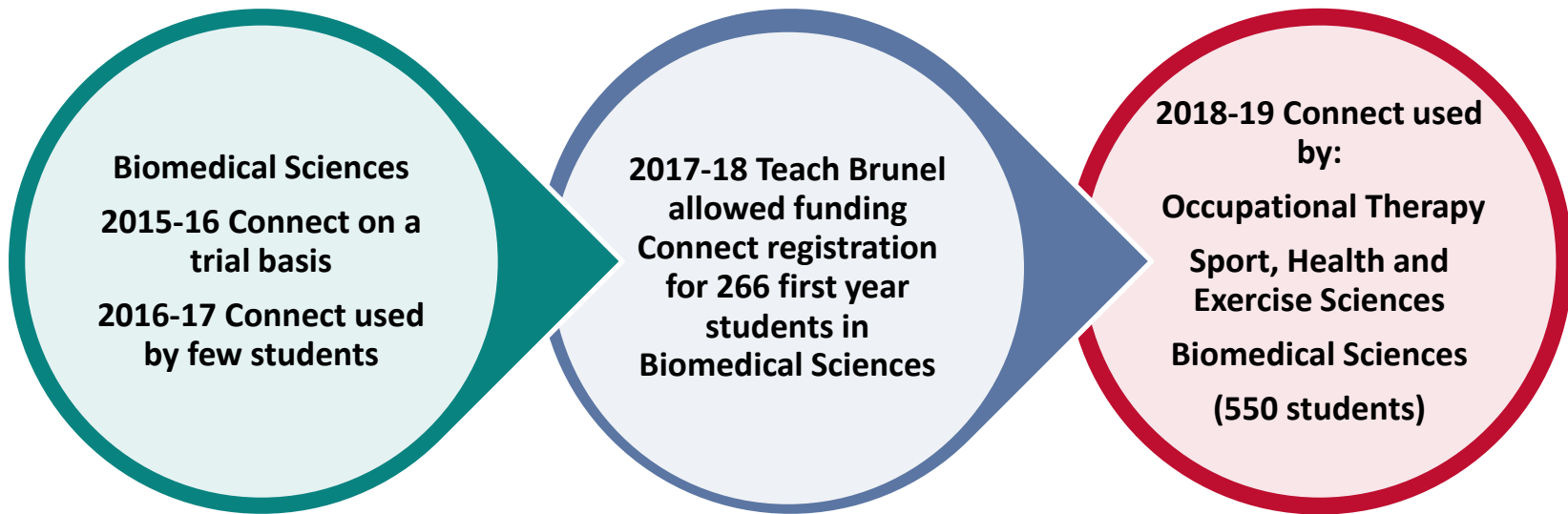
my course resources







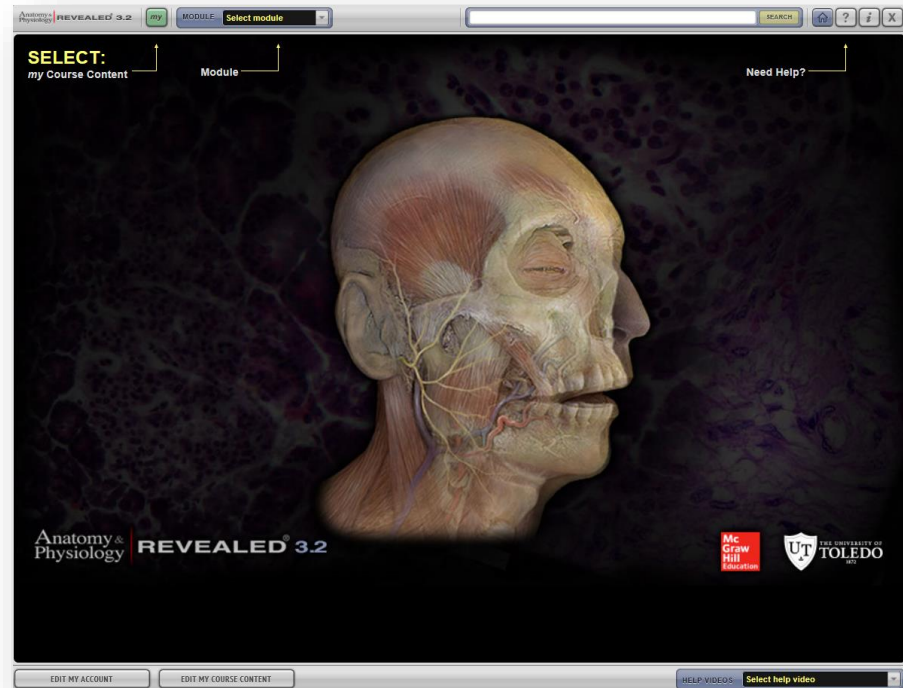
Project Timeline



Try out Connect

Have a taste of the platform and its different applications:

- Cadaver dissecting tool
- LearnSmart quizzes
- E-textbook



Three case studies: Biomedical Sciences



Context:

2nd year running (funded) – led by the same team – with a single teaching block leader

Used student feedback as evidence of successful practice and ideas for what to introduce/improve

Three case studies: Biomedical Sciences

What went well – what we have repeated

- Utilising support of McGraw-Hill to induct student in the use of Connect
- Retained curated pre/post lecture assignments
- Tool, including assignments, embedded in BBL
- Using Connect to support near-peer learning

New adoption

- Based on student feedback introduced animations/cadaver dissection tool in the classroom
- Improved near-peer learning tutorial

Reflection

- Use of 'At Risk' report to monitor and contact students is beneficial.

Three case studies: Biomedical Sciences – Near Peer Learning Sessions



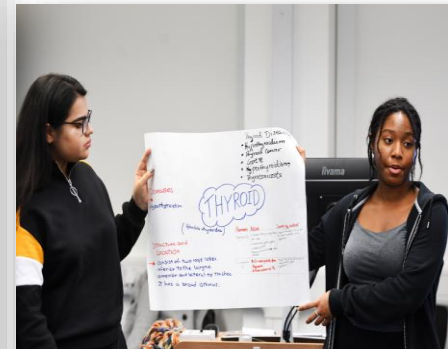
Pre-learning



Student led



Transferring experience



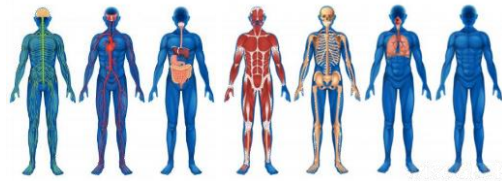
Three case studies: Occupational Therapy

- Human Sciences content organized into 5 main topics:
 1. Breathing & Circulation (BSc & MSc)
 2. Support & Movement (BSc & MSc)
 3. Integration & Coordination (BSc & MSc)
 4. The Senses (BSc only)
 5. Health Psychology (Connect not used for this topic)
- Students used Connect for pre-reading and preparation with LearnSmart quizzes to build up BACKGROUND KNOWLEDGE OF TOPIC
- Weekly 3hr interactive workshop (lab) focusing on CONSOLIDATION & APPLICATION KNOWLEDGE (e.g. testing sensation, pulse rate, joint angle, feeling body parts)
- Every 3 weeks TEAM BASED LEARNING session with Case Study focus

Three case studies: Occupational Therapy

TOPIC	TOPIC LEAD	WEEK	PREPARATION	WORKSHOP CONTENT
INTRO	Tai Frater	1 24.9.18	See Blackboard Learn	INTRODUCTION TF, PNS, LC, LM
TOPIC 1: BREATHING & CIRCULATION	Dr Panagiota Nikopoulou- Smyrni	2 1.10.18	Connect: Chapter 13 Cardiovascular System	CARDIOVASCULAR SYSTEM WORKSHOP PNS & LC
		3 8.10.18	Connect: Chapter 16 Respiratory System	RESPIRATORY SYSTEM WORKSHOP PNS & TF
		4 15.10.18	See Workbook	TOPIC 1 TBL: OT APPLICATION PNS & TF
TOPIC 2: SUPPORT & MOVEMENT	Dr Lesley Collier	5 22.10.18	Connect: Chapter 7 Skeletal System	SKELETAL SYSTEM WORKSHOP LC & TF
		6 29.10.18	Connect: Chapter 8 Muscular System	MUSCULAR SYSTEM WORKSHOP LC & TF
		7		READING WEEK
TOPIC 2 CONTINUED	Dr Lesley Collier	8 12.11.18	See Workbook	TOPIC 2 TBL:OT APPLICATION LC & TF
TOPIC 3: INTEGRATION & COORDINATION	Linda Maskill	9 19.11.18	Connect: Chapter 9 Nervous System	ENDOCRINE SYSTEM WORKSHOP LM & TF
		10 26.11.18	Connect: Chapter 11 Endocrine System	NERVOUS SYSTEM WORKSHOP LM & TF
		11 3.12.18	See Workbook	TOPIC 3 TBL: OT APPLICATION LM & TF
TOPIC 4: THE SENSES	Tai Frater	18 21.1.19	Revise Nervous system	THE SENSES WORKSHOP 1 TF & AF
		19 28.1.19	Connect: Chapter 10 The Senses	THE SENSES WORKSHOP 2 LC & AF
		20 4.2.19	See Workbook	TOPIC 4 TBL: OT APPLICATION TF, LC & AF

Three case studies: SHES



	Content
1	Introductory lecture
	Practical 1: Fundamental Anthropometric and Physiological measures
2	Organisation of the human body (Ch 1,2,3)
	The endocrine system (Ch 17 & 18)
3	The cardiovascular system: blood and heart (Ch 19 & 20)
	The cardiovascular system: blood vessels and circulation (Ch 21)
4	The muscular system (Ch 9, 10)
	The respiratory system: gas transport and control of breathing (Ch 23)
5	Practical 2: HR and BP, ECG, Blood parameters, Metabolic Rate,
6	The respiratory system: mechanics of breathing and lung function (Ch 23)
	The nervous system: organisation of nervous system (Ch 11, 14 & 16)
7	Practical 3: Lab Conditions, Respiratory Function, EMG, Blood Flow,
8	The renal system (Ch 26)
	Water, electrolyte, and acid-base balance (Ch 27)
9	Practical 4: Fluid balance and electrolyte and acid-base balance
10	Nutrition and the digestive system (Ch 24 & 25)
	Anaerobic & Aerobic metabolism (Ch 25)
11	Thermoregulation (Ch 5 & 25)
	Exam preparation
12	Examination Weeks

Physiology (term 1)

eBook chapter relating to each lecture

Personalised (individual student level) quiz relating to each lecture

Cohort level quiz taken before and after each laboratory practical

Quizzes integrated into BBL; available as revision aid

Anatomy (term 2)

eBook chapter relating to each area

Personalised (individual student level) quiz relating to each area

3D cadaver dissection tool used in lectures

Quizzes integrated into BBL; available as revision aid

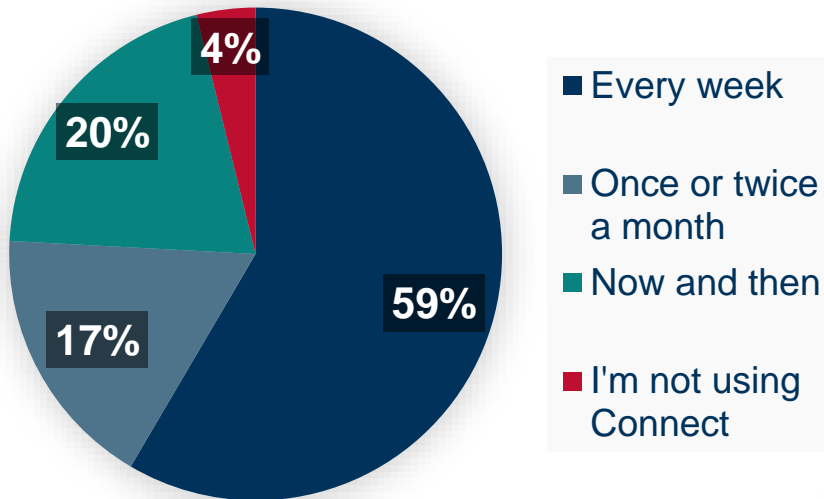
The student view

- **Oliver Britten**
Biomedical Sciences
- **Lynn Gable**
Occupational Therapy
- **Caitlin Champion**
Life Sciences



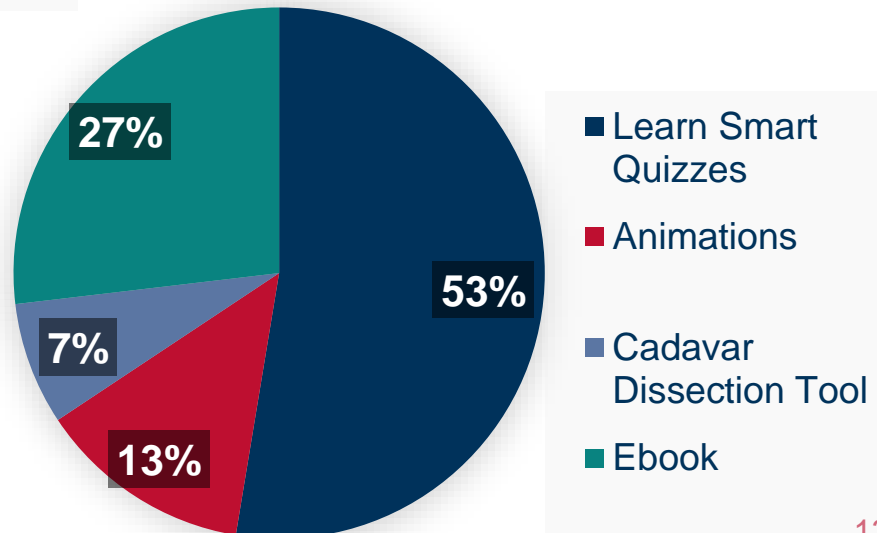
Student feedback polls - Engagement

How often are you using Connect?



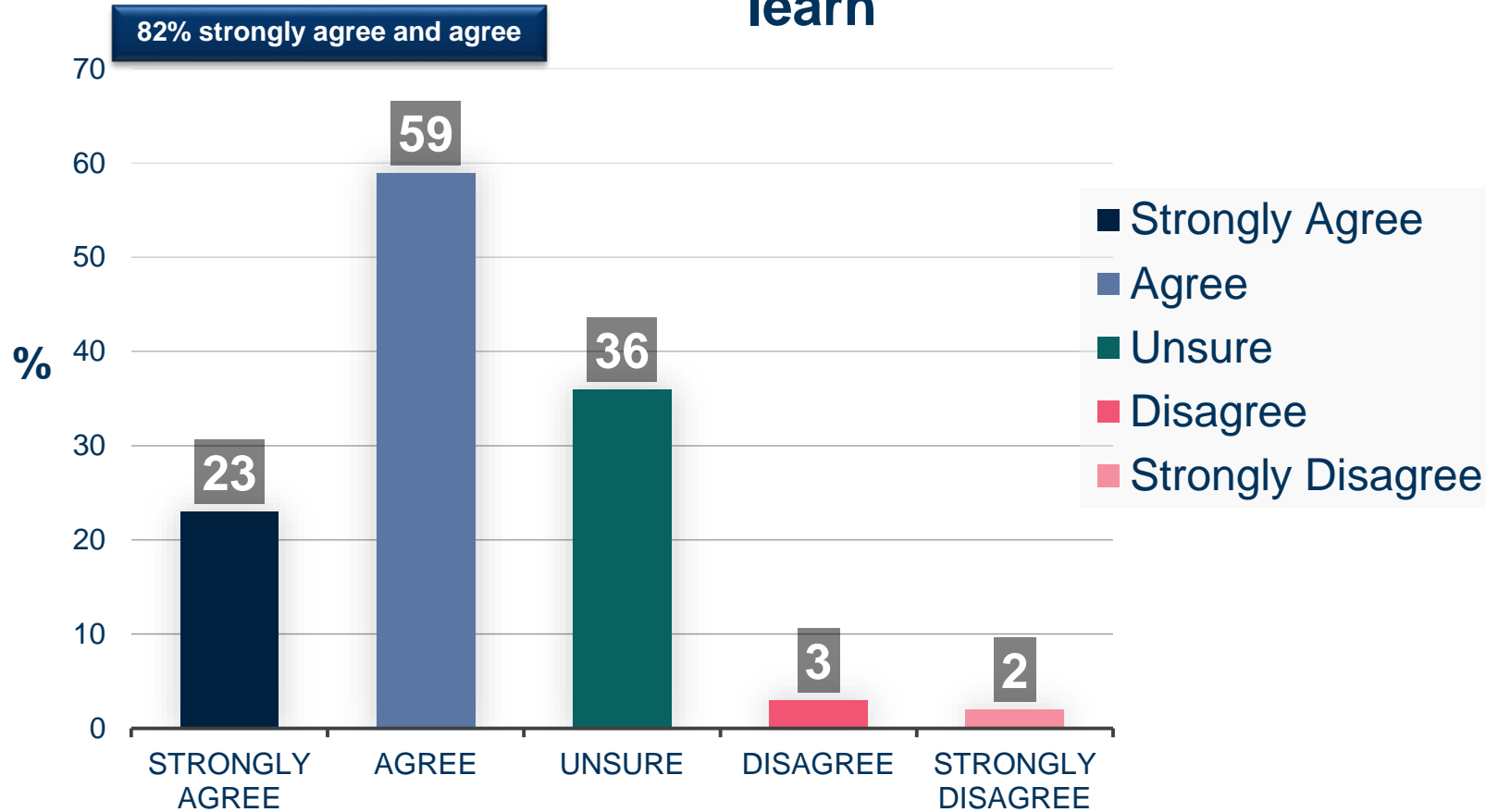
11 Polls
314 participants

What aspect of Connect did you find most useful?



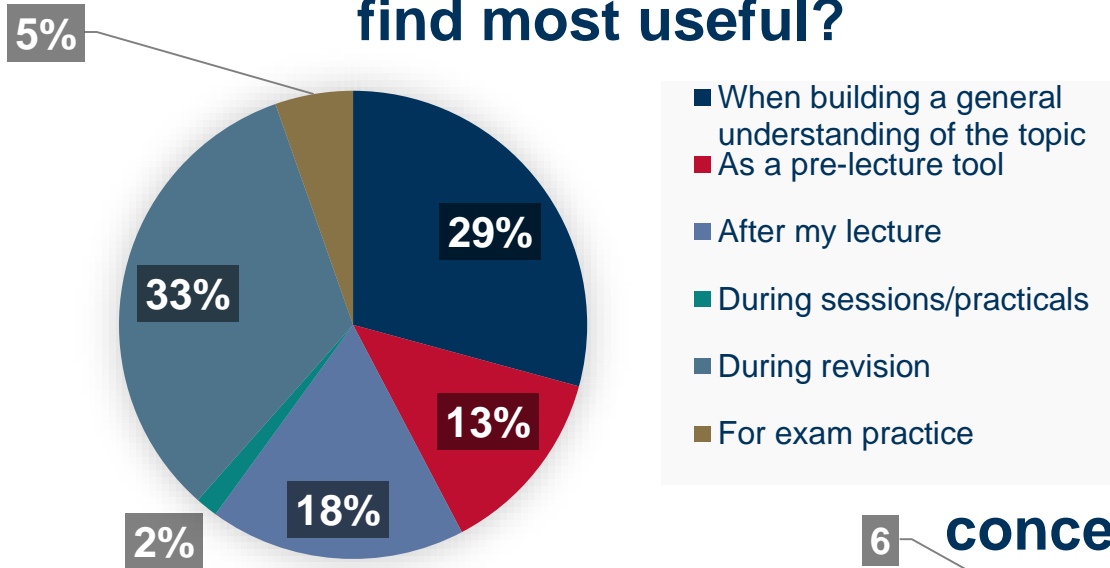
Student feedback polls - Engagement

Connect is an engaging tool that helps you learn

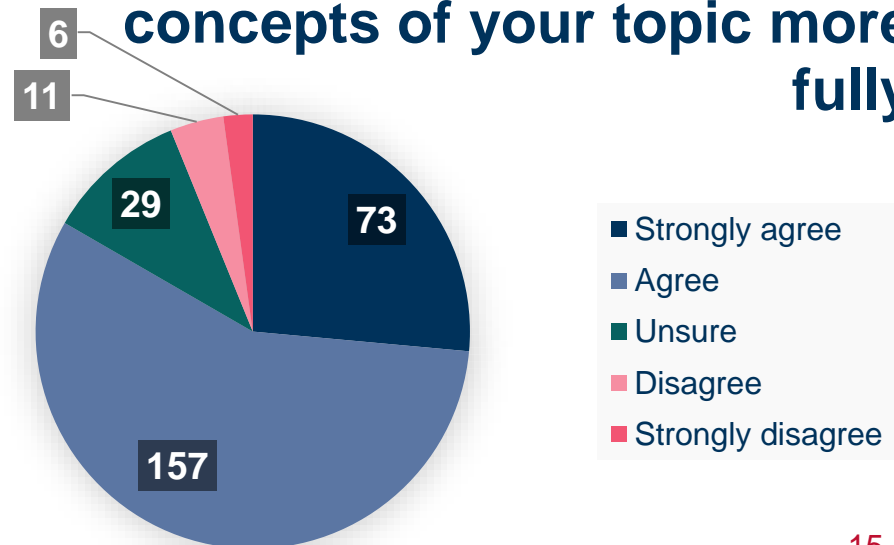


Student feedback polls - Assisting with learning

What aspect of Connect did you find most useful?

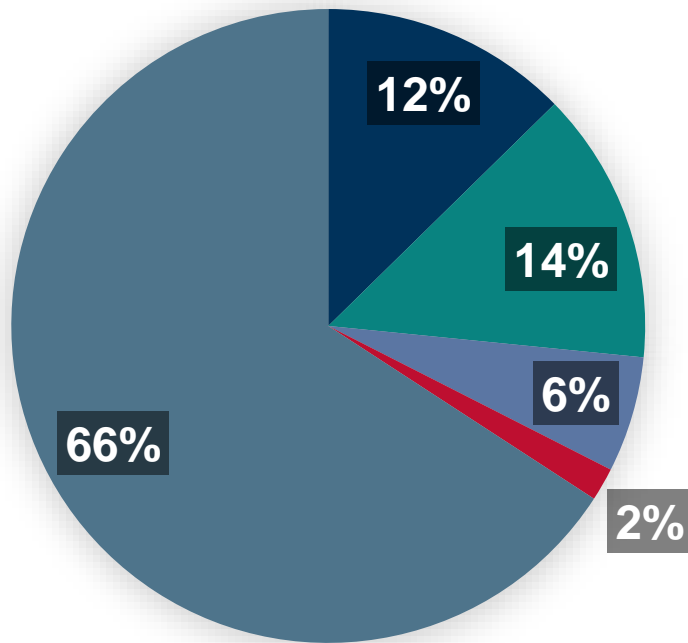


Connect helps you understand the basic concepts of your topic more fully



Student feedback - Limitations

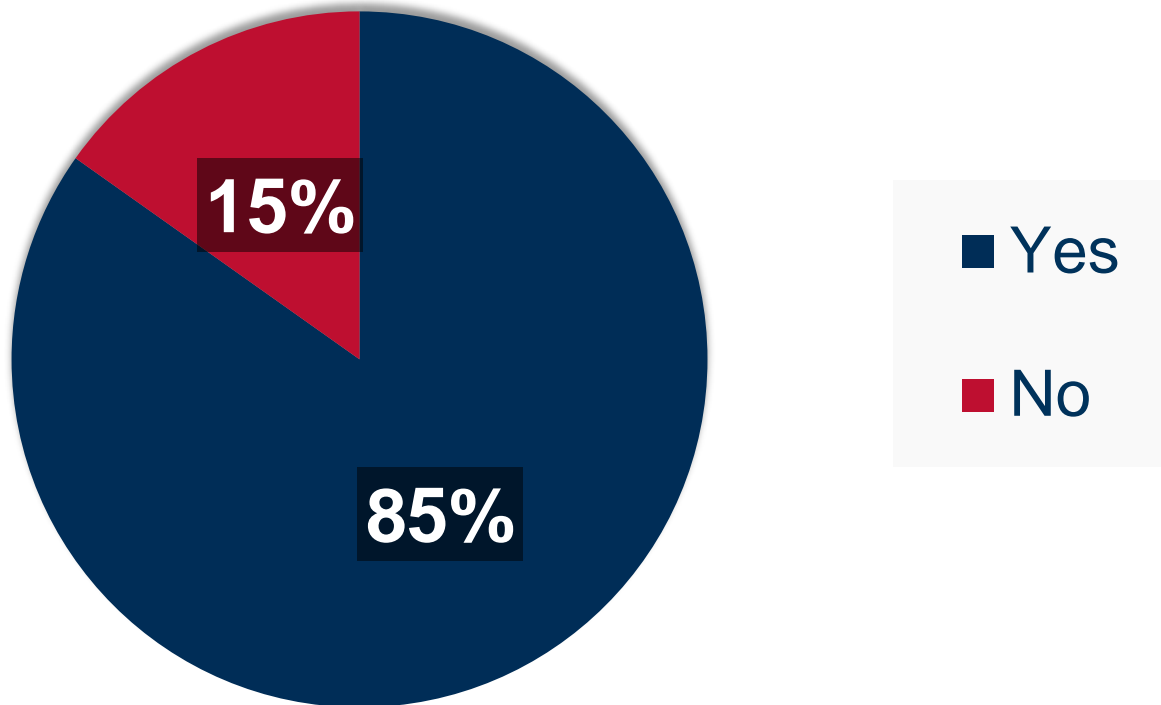
You are not using Connect (or finding it difficult) because:



- You don't like using an online textbook
- You have other methods of study
- You don't understand how to use Connect
- You don't think it is a helpful resource
- N/A I am using Connect

Student feedback polls

Do you think Connect has enhanced your learning?



What do you find least useful about Connect?

I'm using connect on University computers but at home I am using the textbook as connect is not compatible on my personal device

The lady that tells you to read more

There are some sections that we are assessed on as OTs that we are not otherwise clinically responsible for.

It's online and I prefer a physical textbook from which to revise

What do you like most about Connect?

Gives me practice questions and shows me what I need to refresh on. Also, the dissection tools are a nice way to study anatomy.

It highlights the key information clearly and the quizzes will be useful for exam practice and general revision.

It explains complex content in a simple manageable way

The quizzes are very useful as a pre lecture and post lecture tool

That it tries to customize and adapt to each individual learner

Can take it at my own pace. Very informative and the questions at the end boost confidence when you get them correct

Conclusions

Positive experience of digital learning for staff and students

Staff: easy to administer/ enabled a variety of teaching approaches

Students: engaging way of learning

Institution: complements its vision for digital transformation and near-peer/team-based learning

What next?

Use experiences and insight into other colleagues practice to improve the experience next year

Expand experience to other divisions

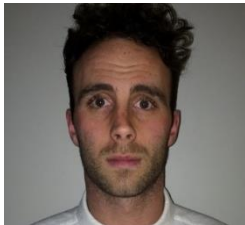
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