



MINDTAP MAKES AN IMPACT AT DEAKIN UNIVERSITY

From Cengage

Abstract

Using MindTap learning technology to study Human Physiology at Deakin University improved learning and increased engagement. Students participated in a trial of MindTap over two weeks as part of a work placement project, using Sherwood's Human Physiology MindTap.

Associate Professor West's challenge

Assoc. Prof. Jan West wanted to find new and innovative ways to use technology in the classroom, to provide her students with high quality interactive material to learn and to improve their understanding of concepts. She was faced with trimester time constraints, the need to cater to different styles of learners in her classroom, and requirements to teach students from varying academic backgrounds with different levels of subject knowledge.

Cengage Learning Consultant Lorelle Wood met with Assoc. Prof. West to discuss ideas for course enrichment.

Assoc. Prof. West had been teaching with Sherwood's Human Physiology for some years and was aware of accompanying resources, but didn't use them extensively.

Changing requirements for teaching

Deakin University is reviewing all teaching via a course enhancement process and academics are encouraged to explore technology to enhance the curriculum.

The Cengage specialist digital support team established a trial module for around 20 students for MindTap Human Physiology. Assoc. Prof. West used the trial as part of a professional placement core unit for biological science and biomedical science students, where students complete an 80 hour placement. Student work included study, focus groups and student intercept surveys to provide direct feedback about their experience of learning with MindTap. The trial also helped Assoc. Prof. West discover how students learn and what electronic technologies they find useful.

The trial

Each student had access to Chapter 9: Cardiac Physiology eBook and activities including interactive content and study aids for that chapter such as Aplia MindApp and CNOW MindApp virtual labs.

Assoc. Prof. West required her students to work through the functionality within the MindTap course and to write and submit a report, reviewing the different components of the MindTap module. Students were asked to comment on all the features within MindTap and whether they believed MindTap helped them to understand concepts in the textbook chapter, based on a pre-test they did earlier in the trimester to determine what kind of learners they were.



Student feedback was overwhelmingly positive. When asked about the overall experience, **53% of students said they 'loved it' and 47% 'liked it'**, commenting they **"just loved it and I like doing everything with my laptop. I found it really suitable for me."**



In terms of ease of use, **88% of students found it 'very easy' or 'pretty easy'** to use MindTap. Students commented that **MindTap was "extremely easy to use and manoeuvre through the site. Great to have every thing in the one place"**. Nearly all students commented on how much easier it was to study with all resources in the one learning path and **65% said they would access via their phone.**

They also gave feedback that helped them to better understand the concepts, with **82% responding 'Yes! I feel confident I understand'** and that MindTap **"was very flexible in how I could study, so I could choose the study methods that were most convenient for me to learn."**

When asked **if they would recommend it to a lecturer, 70% said 'yes'**. Comments included **"It would be a great way to interact and a funky new way to engage students as well as learning new content."**

What now? Assoc. Prof. West is assessing her plans for 2016 and considering giving all students enrolled in the second year physiology units access to MindTap via the Learning Management System. She has invited Cengage to present at the Deakin University-wide Teaching and Learning retreat in June 2016.

She says **"MindTap engages the students and allows them to have fun with their learning. I see MindTap as a useful tool to assist students' understanding of the basic physiological concepts prior to coming to class. There are many new concepts and lots of new terminology for the students to learn. I currently provide enrichment tasks – online quizzes, study questions, case studies and YouTube clips to assist their learning. The benefit of MindTap is that it can all be packaged into one space and we can "Deakinise" the modules with specific case studies. The graphics and the apps available in this resources are also of a very high quality.** There is an increasing number of students not using paper-based items for their learning so this would be of benefit."

COMMENTS FROM STUDENTS WHO USED MINDTAP AT DEAKIN UNIVERSITY

Overall experience of MindTap:

- Excellent. It definitely simplifies the studying experience
- It was helpful and easy to use and had everything needed to study electronically
- Everything in the same place, lot of different tools
- It makes learning easy
- It was great to have everything put together for me
- Much better than any online environment I have used yet much more structure and options than most online resources

Do you think using MindTap helped you to better understand the concepts?

- So far, I have been able to study the course work very efficiently. Hopefully this efficiency enables me to save time and fit more study in
- Gave me the kind of resources I need
- Having videos, notes and diagrams put together proved to be invaluable
- Much more engaging, and engaging content leads to better info retention

Did you find MindTap easy to use?

- After watching the tutorial, MindTap was really easy to pick up
- Everything was easy to find
- Simple to follow if you know what each of the apps do
- It was easy to use and made logical sense when using it
- The interface is simple to use and the simplicity of it makes you want to use it without hesitation

Would you recommend it to a friend?

- I would recommend a friend to at least use it for its organisational purposes (e.g. study guides, assignments etc.)
- Could help a variety of different kinds of people
- I would tell them about it to use it if they were struggling with understanding content as means of new ways of learning the topics

Would you recommend to a lecturer?

- Definitely, because a lot of different students learn differently, and it may assist many students improve grades
- It is very helpful to have all the functions of MindTap and if the instructor used it, it would help students much more
- Yes as it brings everything into the one place
- Very helpful
- It would be a great way to interact and a funky new way to engage students as well as learning new content
- Very good way to structure course content much better than cloud Deakin. Very very recommended



COMMENTS ABOUT THE MINDAPPS



ReadSpeaker app: In summary, it makes study a whole lot easier. No one can really complain with getting the text read to them. In particular, when I'm traveling to Uni on the bus, I can listen to the ReadSpeaker

Glossary app: A simplified way to get definitions. It's much easier than googling terms and having to sift through complex medical definitions that may not apply

Search functionality: For the same reason the glossary function was helpful, it helped me find what I was looking for very quickly and without going over things I either already knew or wasn't looking for

Flashcards app: Because I tend to write summaries, I can use flashcards as a means of forming online banks of information that can then be applied to my written summaries. It also is useful that there are already-made flashcards to be viewed

Assignments app: The assignment app makes it extremely easy to view and sift through assignments. Previously I would have had multiple browsers open to view all my assignments.

Assignments app: This was very helpful because it can test your knowledge before and after the content and gives you feedback on how to improve

Videos: The stem cells video made it a lot easier to understand the content. Instead of going to YouTube and searching for the correct video, the video is already present on MindTap. Again, saving extra browsers and time

Videos: I prefer learning via videos and it was very well done and helped me cement my understanding

Pre-learning assessment: I find that completing quizzes helps me in my journey to achieving a high grade. Sometimes quizzes are limited in units. Therefore I'm glad to see a range of quizzes which give you an opportunity to display what you have learnt and where you struggle

Pre-learning assessment: Being able to refer back to content that I got incorrect, exactly where it was within the website was useful for myself to improve on my previous marks

Case study: Different content, such as the case studies give me an explanation as how the knowledge I have learnt is applied to the real world

Case study: This was great as it applies the content to the real world and makes sense of why you are studying the content

Study guide: The study guide was easy to access and meant that a lot less tabs were open. Normally I have to sift through cloud Deakin's resources to find the study guide. MindTap makes it a lot simpler

Aplia homework: It was another resource for me to apply my knowledge to and learn. Again, it was extremely simple to access

Aplia homework: Helps consolidate the information and judge what topics need to be studied more

Post-learning assessment: Allows you to display your skills and learn the areas you need to work on

Post-learning assessment: Very helpful as it tests your knowledge and prepares you for the final test

Final test: Very easy to access. It also is placed at the end of the list in order for you to work up to. It can also act as a motivator because the more course work you complete, the closer you get to the chapter test!

Final test: I like doing tests because it helps me pick out what I didn't understand and go over it again

IN 25 WORDS OR LESS, HOW WOULD YOU DESCRIBE MINDTAP TO SOMEONE WHO HAD NEVER HEARD OF IT BEFORE?

- MindTap brings everything in your unit to one place. Assignments, study guides, notes, eBooks and results. It simplifies your life
- MindTap is an online resource to much more easily help students use the textbook
- A learning resource allows you to do quizzes and watch videos among other things. There's a bit of everything
- MindTap is a mobile learning environment that lets you keep in track of everything anywhere.
- A great online platform that puts all the information together for you to break down difficult concepts and help learn better
- A reference material resource that allows to find answers to questions you may have and find the answer to for quickly. Allows you to go at your own pace
- I would recommend them to use it as a means of supplementary content to try to further cement their understanding
- Structured with lots of options in how you want to study and succeed