

# Beyond lecture capture – Innovative new uses for video education

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Panopto ANZ

# Flipping the Classroom

Students watch recorded lecture content in preparation for class.

During Class



Students apply knowledge following feedback.

Before Class

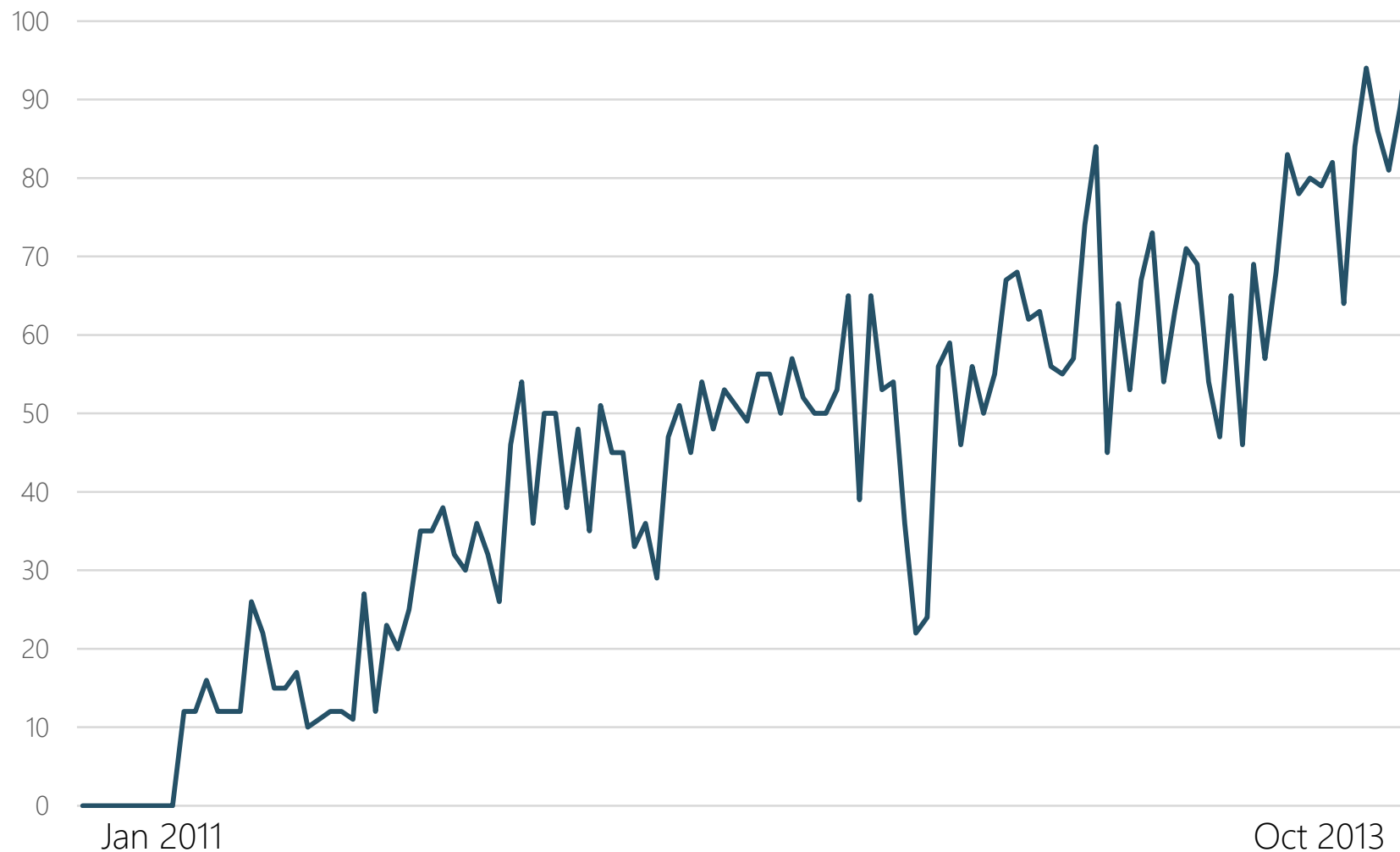


Students practice skills with their peers and lecturers to gain guidance and feedback.

After Class



# The Rise of Flipped classroom

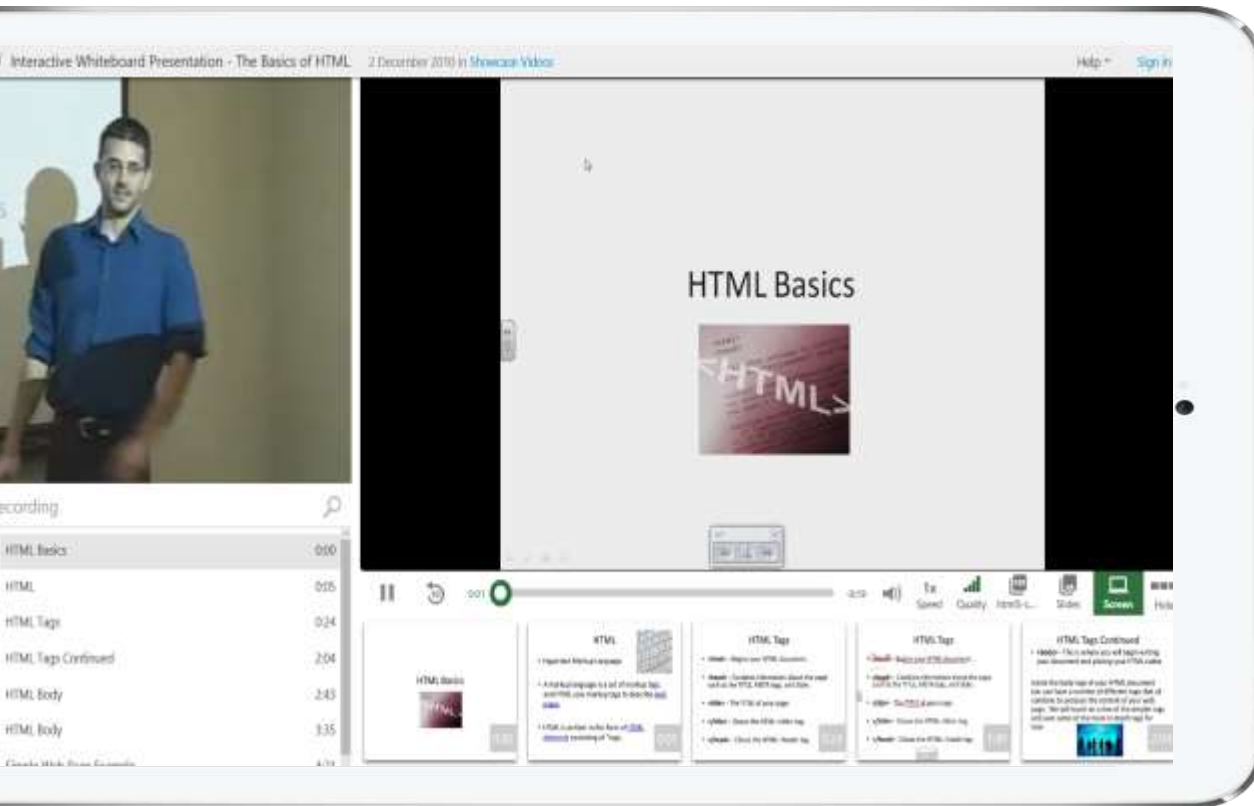


# Case Study

- [Science Centre Innovative Approach](#)
- Waikato – Demonstrations, Learner content and reflection
- Methodology in Oxford University
- Barker College, NSW K-12, flipping language



# Flip the Classroom



Record “micro-lectures” in the office or the field

Students can view recordings on any device

Capture and upload video from mobile devices

# Learner content



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Flipping the teachers!

Peer review &  
feedback

Self reflection

Assessment



Contents Notes Search Info

Search

0:00	What sorts of properties of objects are real and...
0:08	The Four Parts
0:43	John Locke
1:37	18th Century, Ireland Known as Bishop Berkeley...
2:16	Plato
2:38	Locke
4:34	Discussion
5:12	By changing the objects state, does that result in...
6:34	Questions
9:35	Properties
9:48	What is real?
10:21	True Belief Justified by Experience and Evidence
10:40	17th Century French Philosopher, Mathematician and...
11:09	Moore
11:20	Wittgenstein
11:34	What properties are real?
11:56	Can we know these properties via perception?
12:26	Descartes
12:55	Berkeley
13:33	In Summary

Slides Screen Capture

## In Summary

- ▣ Properties are physical attributes that make an object
- ▣ Real is true beliefs justified by personal experience and evidence
- ▣ All properties of objects are real
- ▣ The only way we can know these properties via perception

### Descartes Philosophical Theories

- In his meditations Descartes shows that we have to have doubts of the senses.
- Descartes reaches a Perceptual Hypothesis of the senses, body and the world.
- The Hypothesis is known as the Evil Demon.
- The meditations go about breaking everything down, then rebuilding it from scratch.
- He reaches one undeniable truth, commonly known as, "Cogito ergo sum, I think therefore I am."

### Berkeley

- There are only ideas and immaterial substances referred to as minds, souls, spirits.
- If there were material bodies we would know them only via the senses or by reason.
- Our senses give us only knowledge of our sensations - ideas, and not of the external world.
- By reason... Perceptible things can only exist in a mind that perceives them for anything things to exist is to be perceived.

### In Summary

- Properties are physical attributes that make objects
- Real is true beliefs justified by personal experience and evidence
- All properties of objects are real
- The only way we can know these properties via perception



# Learner reflection



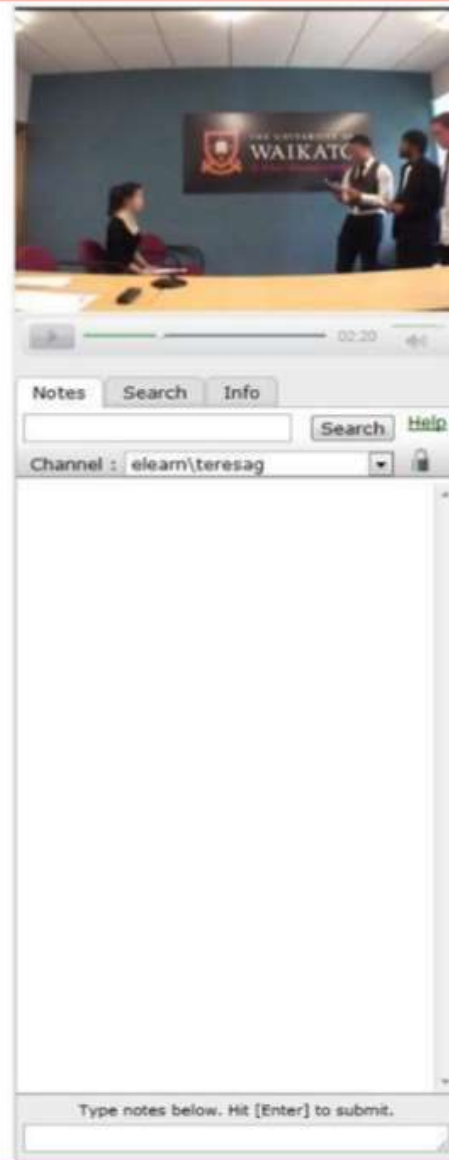
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## Reflection on performance

- Dragon's Den
- Languages
- Music
- Presenting

## Post event review

- With teacher
- With peers
- Self



# Demonstrations



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Document camera

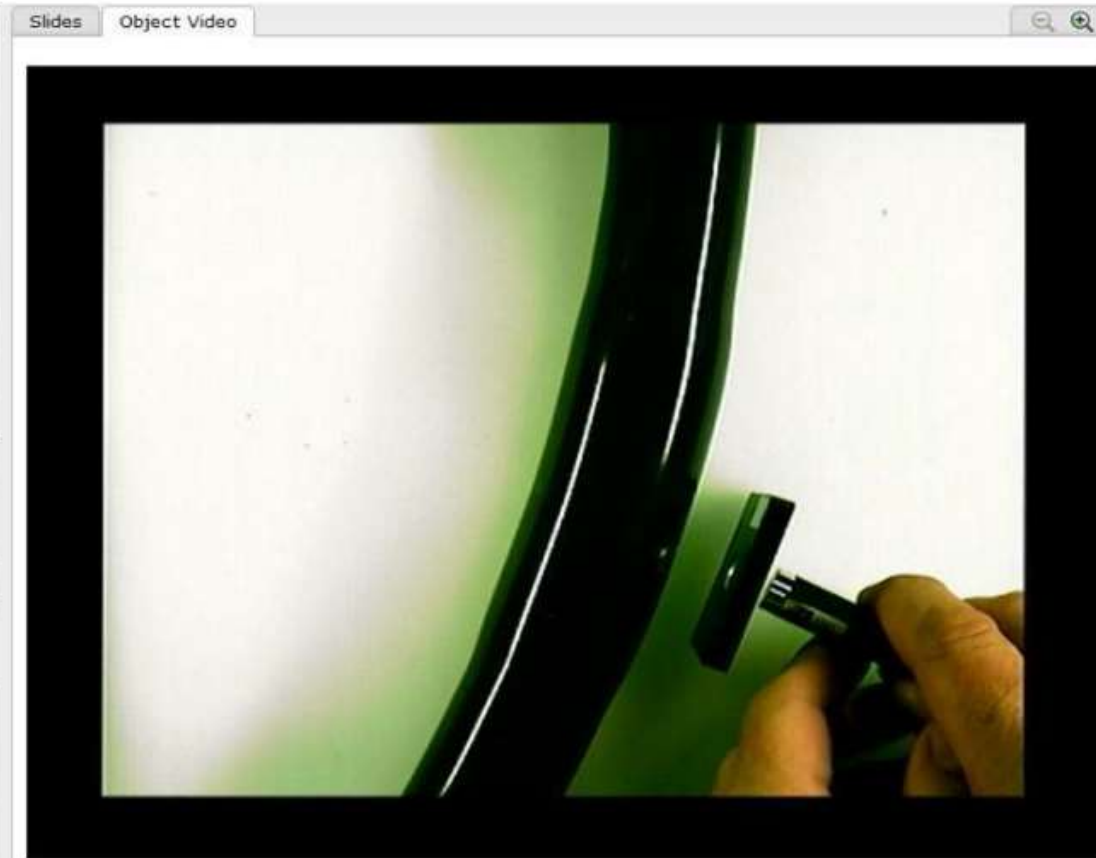
Secondary video

Tablets

High repeat events



Contents	Notes	Search	Info
13:49	Spontaneous emission		
15:27	Stimulated emission		
16:24	Laser components and laser action		
24:52	Types of Laser		
26:57	Characteristics of Laser Light		
34:11	Irradiance		
36:56	Part 1b: Laser Bioeffects and Hazards		
37:04	Adverse effects		
45:59	VIDEO available separately on Moodle		
46:39	The Effect of Wavelength		
48:48	The optical gain of the eye		
49:19	<b>BURNING HOLES demonstration</b>		
52:25	Retinal Injury		
59:02	Common Causes of Laser Accidents		
1:03:42	Retinal Injury		
1:03:45	Laser pointers		
1:04:55	Laser pointers and aircraft		
1:06:52	Laser exposure in police helicopters		
1:09:48	Part 2a: Laser Safety Standard		
1:10:12	Hazard classes		
1:14:33	M for magnification		
1:14:53	Classes		
1:15:05	Warning Labels		





# Language learning

Pronunciation  
Mouth shape  
Repetition  
Practise  
Focus



Contents	Notes	Search	Info
<input type="text"/> <input type="button" value="Search"/>			
0:30	Rational		
0:34	Intense		
0:38	Tendency		
0:42	Consequences		
0:46	Cooperation		
0:50	Frenzied		
	Frantic		
0:52	Words in context		
0:58	Listen and repeat the following: He was the only...		
1:06	He was the only eyewitness to the accident.		
1:13	The stampede caused a massive traffic jam.		
1:21	She panicked when she couldn't open the door.		
1:28	We need to behave in a rational manner.		
1:33	There were intense emotions at the meeting.		
	Words in context		
1:36	Listen and repeat the following: There is a tendency...		
1:44	There is a tendency to run when you hear a fire...		
1:52	Every action has its consequences.		
1:59	Cooperation means working together.		
2:07	There was a frenzied uproar during the football...		
2:11	He was frantic when he lost his keys.		

Slides

## Words in context

Listen and repeat the following:

- There is a tendency to run when you hear a fire alarm.
- Every action has its consequences.
- Cooperation** means working together.

Words in context

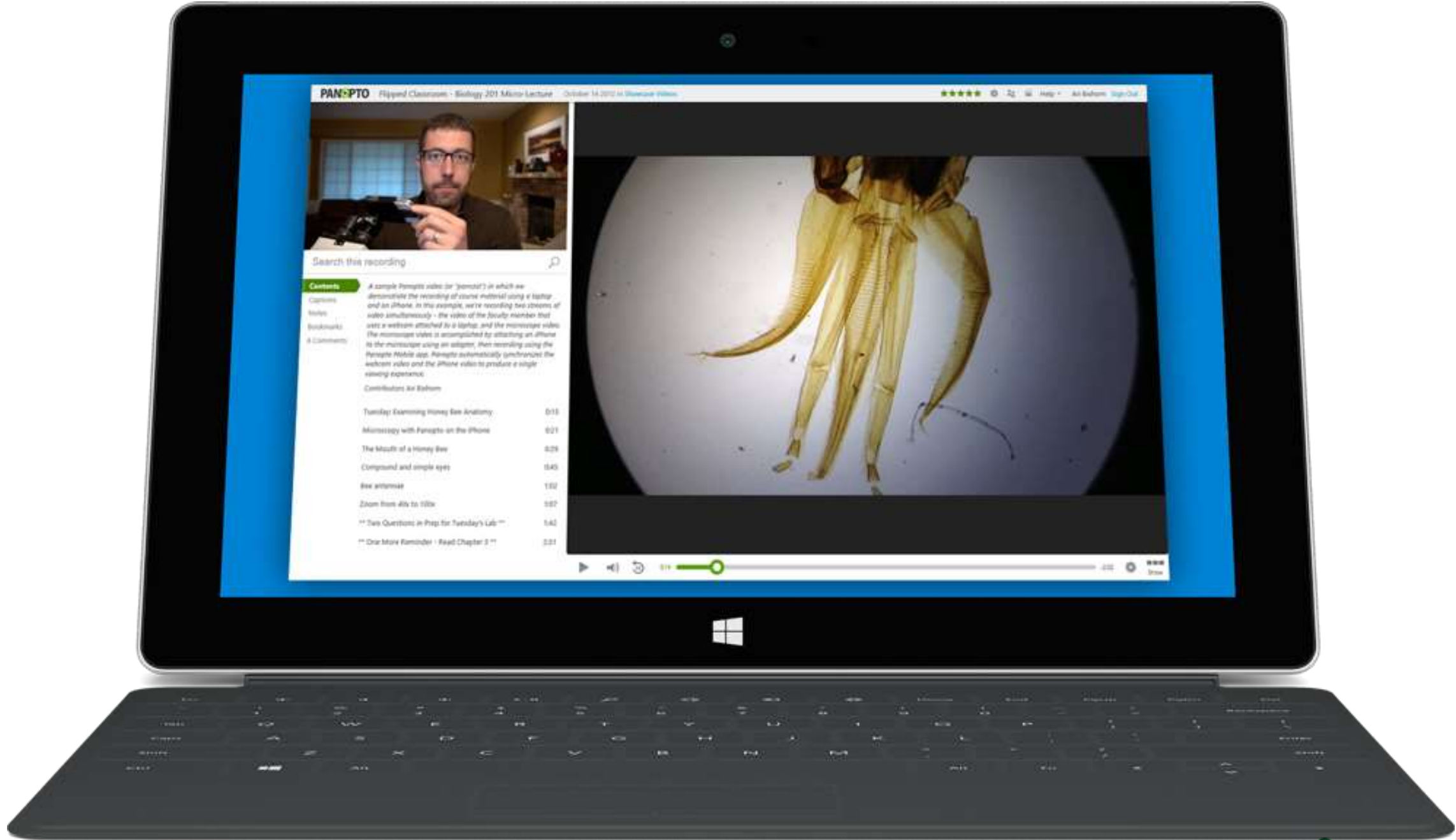
Listen and repeat the following:

- There is a tendency to run when you hear a fire alarm.
- Every action has its consequences.
- Cooperation** means working together.

Words in context

Listen and repeat the following:

- There is a tendency to run when you hear a fire alarm.
- Every action has its consequences.
- Cooperation means working together.
- There was a **frenzied** uproar during the football match.



# User Cases

## What's different to a podcast?

- podcasts.ox.ac.uk

Publicly available,  
millions of  
viewings/downloads

- Recorded lectures via WebLearn

Private, for on-course students or other  
university members  
(depending on access to the WebLearn site...)



### Barker College

Barker College in Australia uses Panopto to improve teaching and learning by capturing lesson content, flipping the classroom and more.

#### Discovering a new tool for inspiring and engaging learners

At Barker College, teachers are challenged to 'inspire each learner, every experience, every day'. This means that they are constantly looking at ways to improve the learning environment for their students and integrate pedagogical best practices into the classroom. As a result of this continual drive to improve, school staff became increasingly interested in the possibilities offered by video as a learning tool. With the widely documented use of YouTube and other online video platforms, teachers knew that their students were already well-versed in using video to teach themselves new skills. It made perfect sense, therefore, for the institution to start using video in a more structured way.

While staff were keen to start experimenting with video, their existing setup gave them very limited opportunities to record classroom content. Consequently, they began to look for a solution that would support their ambitious new aims with video. They knew they wanted more than just a basic video repository and were looking for a platform that would allow them to:

- Employ the flipped classroom model, enabling them to record pre-class materials from a range of locations.
- Give students easy access to video content through a combination of live streamed events and on-demand recordings.
- Enhance their offline campus activities, which support indigenous groups in their region.

They wanted to deliver all of this with a platform that was both simple and secure. Having reviewed their options, they selected Panopto based on its ease of use and flexibility.

#### Barker begins using video in the classroom

During the initial roll-out of Panopto, Barker College focused on recording classroom content so that their students would be able to review lessons on-demand for revision purposes. Because Panopto is easy to install on laptops, smartphones and tablets,



#### About the College

Barker College is an Anglican day and boarding school of just over 2,000 students situated 25 kilometres to the north of Sydney, Australia. Established in 1890, Barker caters for boys from pre-kindergarten to Year 12 and for girls from Year 10 to Year 12.

Total enrolment: 2,060 students  
Website: [www.barker.nsw.edu.au](http://www.barker.nsw.edu.au)

"I'm still exploring all the possibilities and options that Panopto offers. In the first instance, I've been able to aggregate all my existing training videos from various external repositories and our own school server into one centralised and secure location. I can then edit and combine various sections in situ, and create snippets, clips and highlights quite easily, as well as being able to control who sees them. I've also been able to add PDF documents to videos to add more detail for learners."

— Keith Vail,  
Director of Curriculum – ICT,  
Barker College





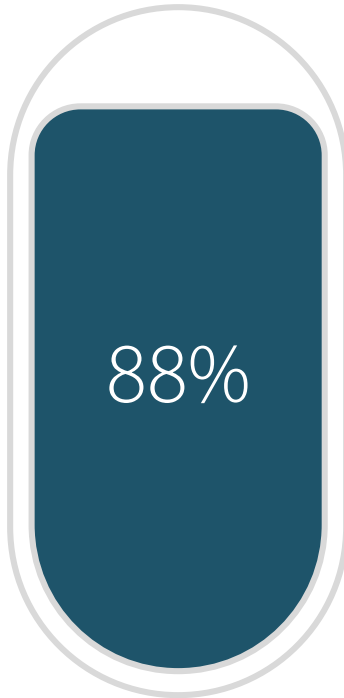
Winston-Salem State University - Exam Scores in Biology 3311

# Student Achievement

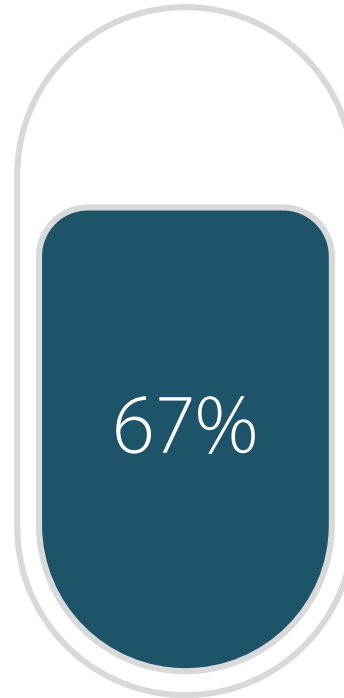
- Improved exam scores
- Reduced failure rates
- Improved engagement at all levels
- Retention of Knowledge

# Student and Teacher Satisfaction

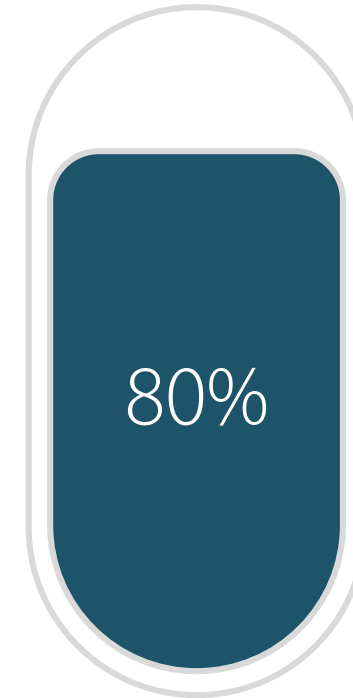
Percentage of teachers  
citing an increase in  
job satisfaction



Percentage of students  
reporting improved  
standardized test scores



Percentage of students  
reporting improved  
attitudes toward school



"After flipping, I will never go back to traditional teaching methods."

"I have never seen my students work this hard or learn this much."

"Flipping has dramatically improved the number and quality of interactions with individual students."



# What's Required



Pedagogy



Technology

Additional information

<https://www.panopto.com/panopto-for-education/flipped-classroom/>

**White Papers and guides**

[Get in contact: anz@panopto.com](mailto:anz@panopto.com)

# Technological considerations

Institutions flipping the classroom need:

- Consistent, accessible, secure video storage
- Support for recording video from any location with or without connectivity (including via mobile)
- The ability to capture anything and everything in a single video
- A playback experience for viewers optimised for mobile
- The ability to search inside video files for specific content

# Many Ways to Flip

Traditional inversion

Faux-flipping

Discussion-oriented

Virtual flipping

Demonstration-oriented

Group-based flipping

Flipping the teacher