



Developing Environmental  
Law Champions

Strengthening the Capacity For Environmental and Climate Change Laws  
in Asia and the Pacific



# Session 10: Technology-Based Approaches

Professor Amanda Kennedy  
University of New England

Kathmandu, Nepal  
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30 years later...

All of these things fit  
in your pocket...



# GENERATIONS

Characteristics	Maturists (pre-1945)	Baby Boomers (1945-1960)	Generation X (1961-1980)	Generation Y (1981-1995)	Generation Z (Born after 1995)
<b>Aspiration</b>	Home ownership	Job security	Work-life balance	Freedom and flexibility	Security and stability
<b>Attitude toward technology</b>	Largely disengaged	Early information technology (IT) adaptors	Digital immigrants	Digital natives	Technoholics
<b>Attitude toward career</b>	Jobs are for life	Organisational—careers are defined by employers	Early 'portfolio.' careers — loyal to profession, not necessarily to employer	Digital entrepreneurs — work "with" organizations not "for"	Career multitaskers
<b>Signature product</b>	Automobile 	Television 	Personal computer 	Smart phone 	Nano-computing, 3-D print, driveless cars 
<b>Communication media</b>	Formal letter 	Telephone 	E-mail and SMS 	SMS or Social media 	Hand-held communication devices 

U.S. Employed Workforce



U.S. Unemployed Workforce



# MOBILITY



# TOP NAMES

- |         |   |          |
|---------|---|----------|
| William | 1 | Lily     |
| Jack    | 2 | Chloe    |
| Jacob   | 3 | Isabella |
| Lachlan | 4 | Mia      |
| Oliver  | 5 | Olivia   |

# GENERATION Z

★ BORN 1995-2009 ★

# EFFECTIVE ENGAGEMENT

BB	Verbal	→	Visual	Z
	Sit & listen	→	Try & see	
	Teacher	→	Facilitator	
	Content (what)	→	Process (how)	
	Curriculum centred	→	Learner centric	
	Closed book exams	→	Open book world	

# EDUCATION



UNIVERSITY EDUCATED

# DIGITAL INTEGRATORS



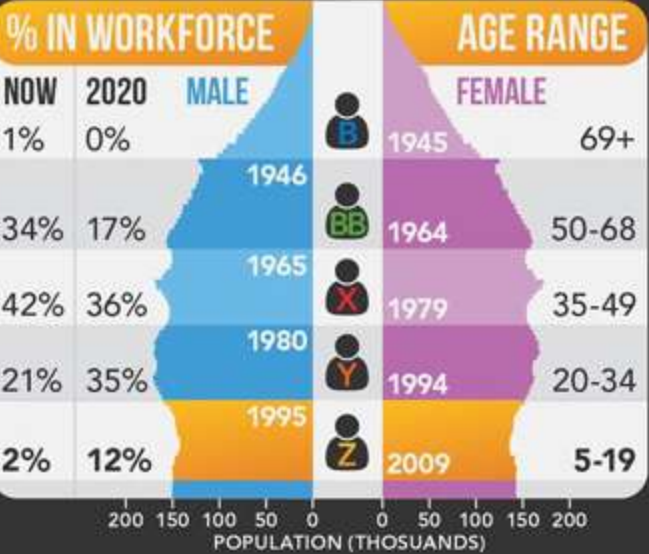
# WEALTH

Avg. annual earnings in 2063 (as Gen Z retire)\*

\$222,000

Average capital city house price (2063)\*

\$2.5 MIL.



# SLANGUAGE



# HEALTH

% likely to be obese/overweight when all Gen Z have reached adulthood (2027)\*



# GLOBAL GENERATION

2,000,000,000 Z BILLION GEN Zs



# REDEFINED LIFESTAGES





Present-day schools cater to Generation Z, children aged 6 to 18 years.

## Gen-zers have not seen the world without technology



**60%**  
OF GEN Z



say they like to collaborate and share their knowledge with others online



**50%**  
OF GEN Z



'Can't Live Without YouTube'



**93%**  
OF STUDENTS



students feel confident as they understand technology well

**Technology is a must for schools catering to Generation Z**



# Technology Based Approaches

- Student demand for technology based approaches is increasing – need for increased flexibility
- Universities also consider online teaching as having considerable benefits – particularly economic
- Legal professional bodies are increasingly recognising digital literacy as a core competency

‘Technological tools are no different than, for example, cars: Their value depends on what we do with them and why’

(Smith, C. T. (2002). Technology and legal education: negotiating the shoals of technocentrism, technophobia, and indifference.(Erasing Lines: Integrating the Law School Curriculum). *Journal of the Association of Legal Writing Directors*, 1(1), 247-257, p. 247)



# Technology Based Approaches (cont'd)

- Technology based approaches can include electronic resources as a teaching tool – e.g. support activities for face-to-face teaching
- It can also refer to a whole-of-course pedagogical\* approach – e.g. use of videoconferencing to deliver an entire course

\*Pedagogy = the method and practice of teaching





- HOME
- ABOUT US
- PAY IUCN DUES
- ACADEMY FELLOWS
- NEWS

FEATURED NEWS

**Pace University's Elisabeth Haub School of Law Dean Emeritus Richard Ottinger has been recognized by the American Bar Association**

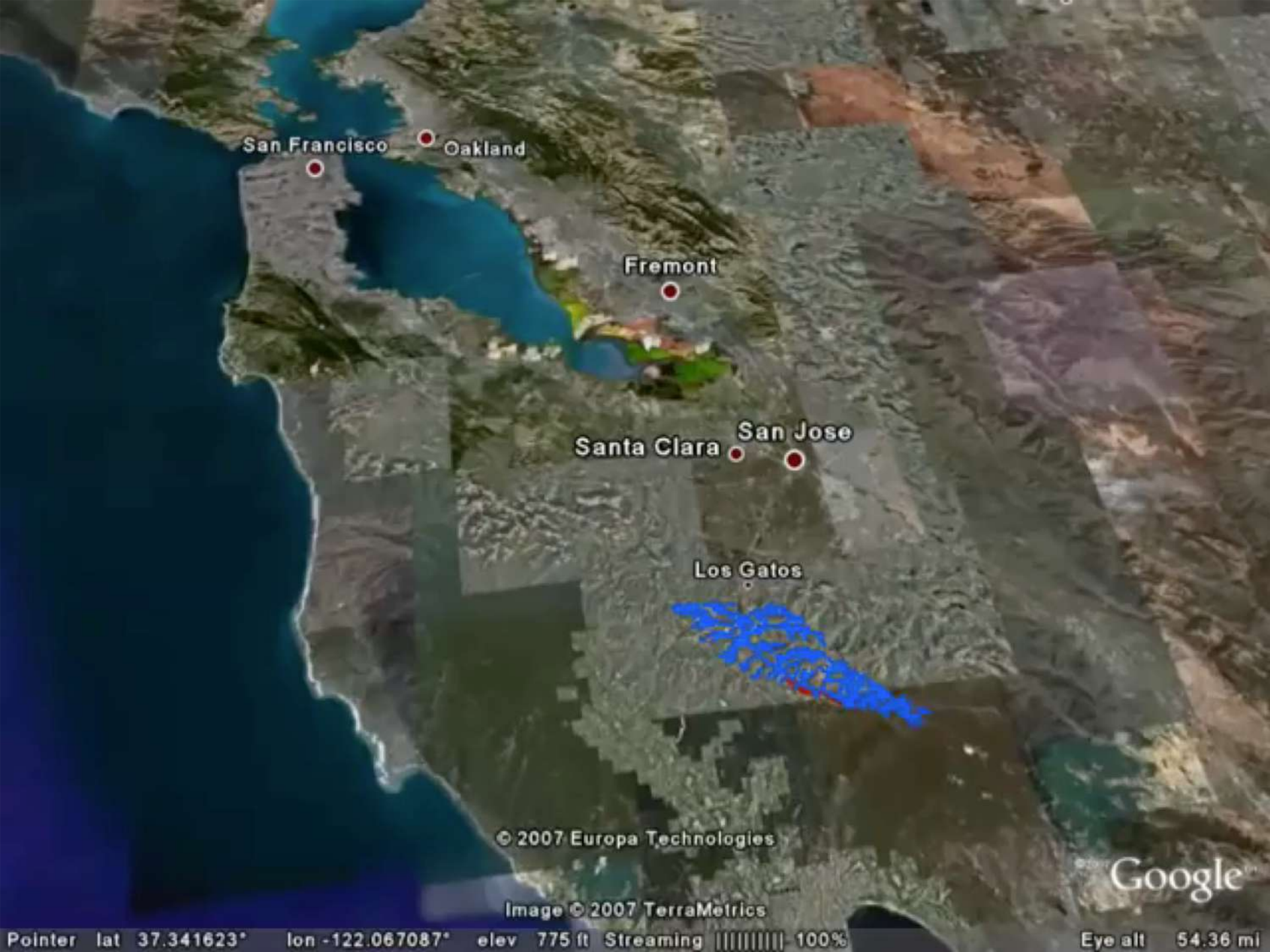
Pace University's Elisabeth Haub School of Law Dean Emeritus Richard Ottinger has been recognized by the American Bar Association for his leadership in environmental policy. The ABA's Section of Environment, Energy and Resources presented Ottinger with its 2017 Award for Distinguished Achievement in Environmental Law and Policy at its annual meeting on August 13.

GLOBAL PACT FOR THE ENVIRONMENT

In the spotlight:  
Global Pact for the Environment







San Francisco

Oakland

Fremont

Santa Clara

San Jose

Los Gatos

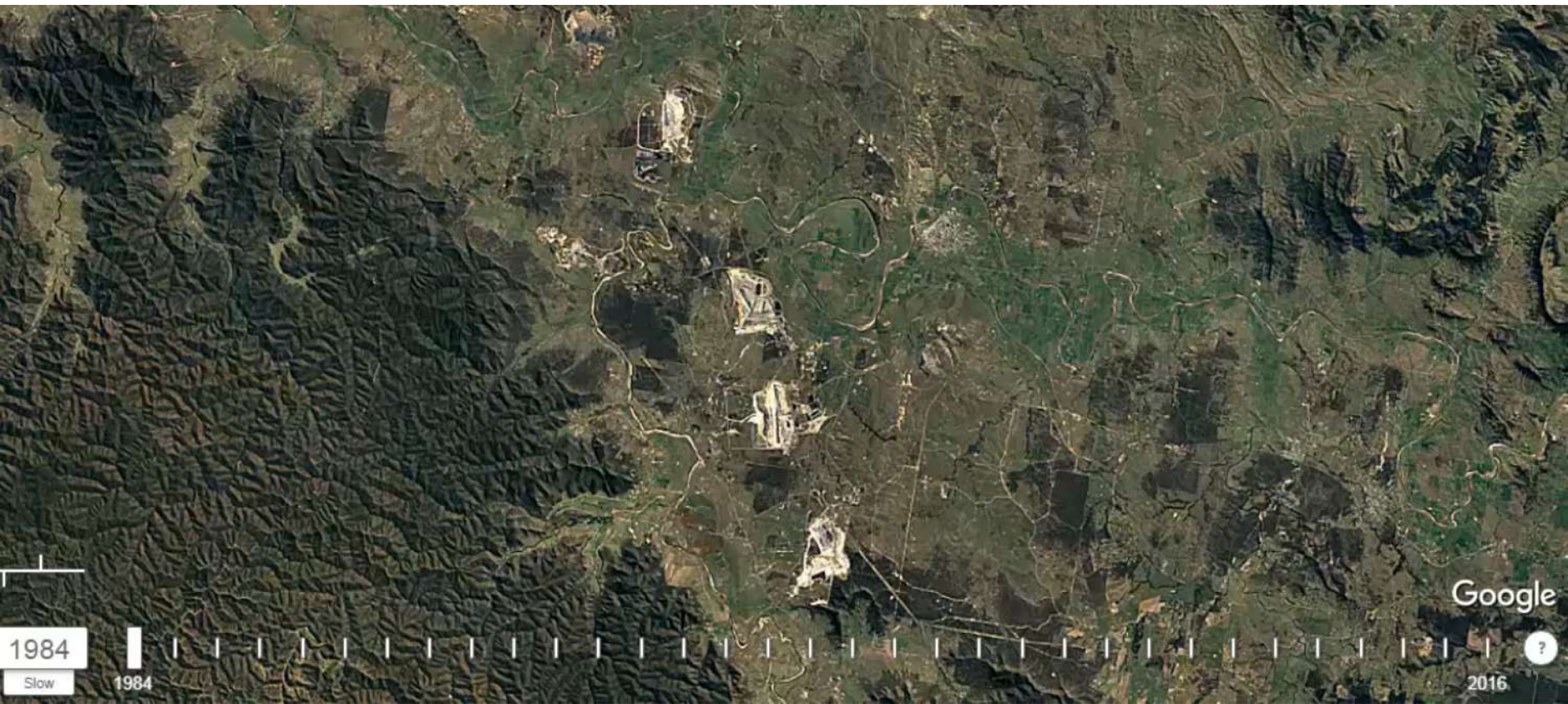
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Pointer lat 37.341623° lon -122.067087° elev 775 ft Streaming ||||| 100%

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# Technology as a Supplementary Tool

- Support for face-to-face learning
  - Refer to list of ‘Environmental Law Electronic Databases’
  - Key online resources that can supplement teaching
- Can technology be ‘more than a tool’?
  - See Caron, Paul L, and Gely, Rafael. ‘Taking Back the Law School Classroom: Using Technology to Foster Active Student Learning’ *Journal of Legal Education* 54.4 (2004): 551-569 and Perlin, Michael L. ‘Online, distance legal education as an agent of social change.’ *Pac. McGeorge Global Bus. & Dev. LJ* 24 (2011): 95.



# Technology as a Pedagogical Approach

- Using technology to connect instructors and students outside the conventional classroom
  - In particular, those who may be separated by distance or time
- Important to think about whether changes in the way the law is taught are necessary
  - Learning theory should guide the decision of what technologies are used – rather than using technology ‘for technology’s sake’

“Just as in face-to face teaching when you change the layout of the classroom and organization of the desks you need to teach in different ways and students will interact in different ways. The same occurs in an online space.”

(Redmond, D. P. (2011). *From face-to-face teaching to online teaching: Pedagogical transitions*. Paper presented at the Changing Demands, Changing Directions. Proceedings ascilite, Hobart. <http://www.ascilite.org/conferences/hobart11/downloads/papers/Redmond-full.pdf>, p. 1057).



# Technology as a Pedagogical Approach (cont'd)

## Learning Theories and Suggested Technologies

- Behaviourism

A learning theory that views knowledge as a commodity to be transferred from teacher to student

- Use of Learning Management System
- Concise video lectures
- Online games / quizzes to reinforce content – e.g. Law School Dojo (<https://lawdojo.co/>)
- Online tutorials / webinars (e.g. Adobe Connect, Zoom)



# Technology as a Pedagogical Approach (cont'd)

TORTS 1067

Which is not a component of compensatory damages?

Pain & Suffering

Detention

Medical Expenses

Lost Earnings

**CORRECT!**



# Technology as a Pedagogical Approach (cont'd)

## Learning Theories and Suggested Technologies

### • Cognitivism

A learning theory that sees value in the environmental conditions that facilitate learning; emphasises the role of practice and feedback

- Webinar-based facilitation is ideal – enables students to take a cognitive approach
  - Free mind-mapping software such as Popplet or MindMeister can be used to articulate key concepts or processes
- Hypothetical scenarios – can be built into the Learning Management System in ways that enable students to progress through an activity in an adaptive manner
- Reflective activities – ePortfolios, blogs, private discussion forums









## Technology as a Pedagogical Approach (cont'd)



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## Learning Theories and Suggested Technologies

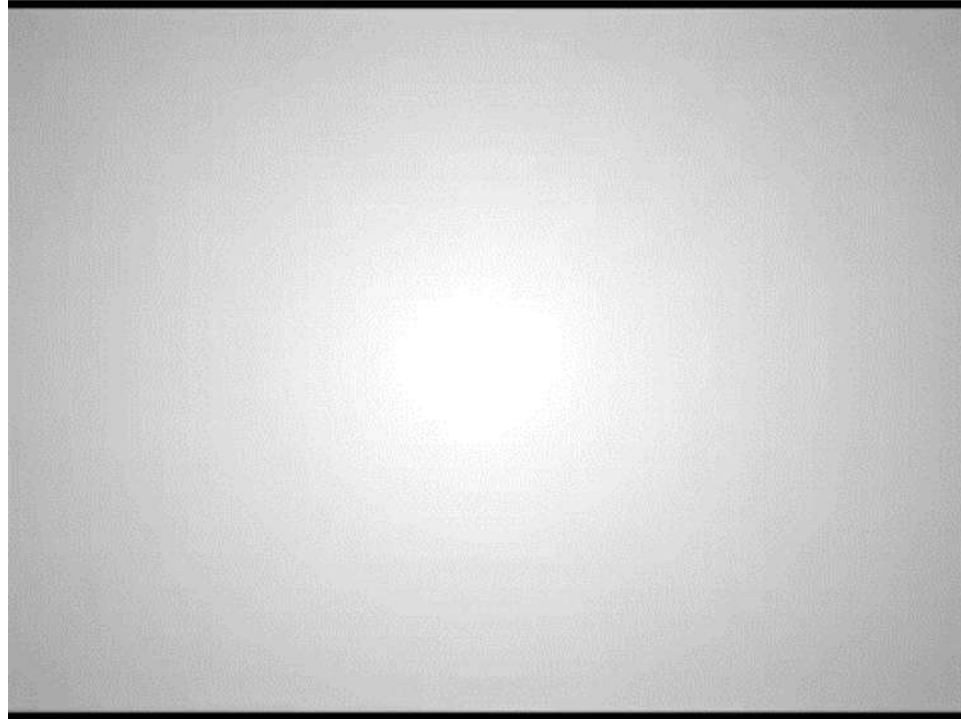
### • Constructivism

Learning theory that sees learning as individual – different for each person, the learner should thus control their learning

- Interactive lectures / seminars (with live feedback / poll tools)
- Student led online-discussion forums
- Filming or animating analysis of unit content – documentary creation using video on mobile devices
- Reflective blogs / ePortfolio
- Simulations and role play – videoconferencing can create client-based scenarios for students to participate in authentic learning environment (e.g. moot)

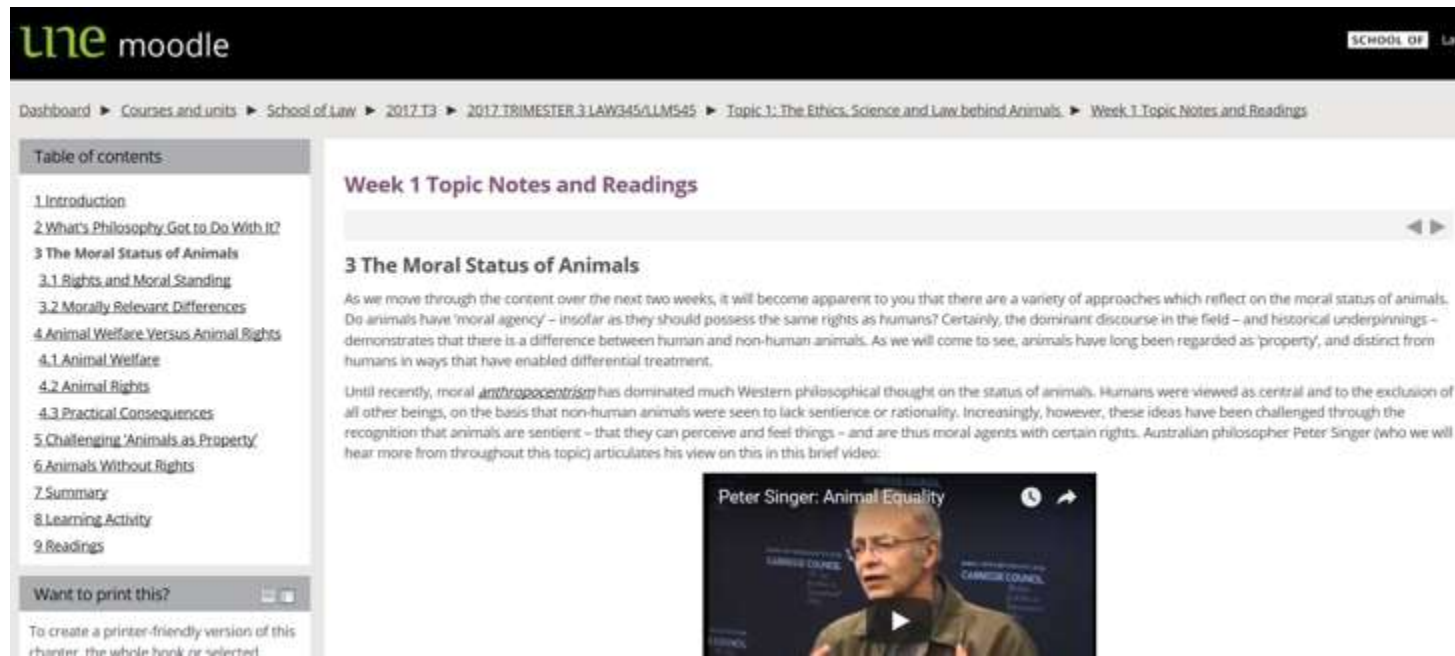


# Technology as a Pedagogical Approach (cont'd)



# Technology as a Pedagogical Approach (cont'd)

## Demonstration – Learning Management System



The screenshot displays a Moodle LMS interface. At the top left is the 'moodle' logo. The top right corner shows 'SCHOOL OF LAW'. The breadcrumb trail reads: 'Dashboard > Courses and units > School of Law > 2017.T3 > 2017.TRIMESTER 3 LAW345/LM545 > Topic 3: The Ethics, Science and Law behind Animals > Week 1 Topic Notes and Readings'. On the left, a 'Table of contents' sidebar lists items 1 through 9, with '3 The Moral Status of Animals' selected. Below this is a 'Want to print this?' section with a printer icon and a note: 'To create a printer-friendly version of this chapter, the whole book is selected'. The main content area is titled 'Week 1 Topic Notes and Readings' and features a section for '3 The Moral Status of Animals'. The text explains that as the course progresses, various approaches to animal moral status will be explored, questioning if animals have 'moral agency' and should have the same rights as humans. It notes that the dominant discourse historically viewed animals as property, distinct from humans. A paragraph discusses how 'anthropocentrism' has dominated Western thought, viewing humans as central and other beings as lacking sentience or rationality. It mentions that these ideas are being challenged by the recognition of animals as sentient and thus moral agents. A video player is embedded, titled 'Peter Singer: Animal Equality', showing a man speaking at a podium. The video player includes a play button and social media icons.

