

# Energising the Teacher, Energising the Learning Process *-In search of a Paradigm Shift*

Dr Chandana Hewege  
Faculty of Business & Law  
Swinburne University of Technology  
Australia

# Turbulent Higher Education Context



On the problems teachers face

Me!



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So, I asked my colleagues about their perceptions of being energised!

One of them said:

“ Well.. It is like getting wet while wearing dark pants. You only get a warm feeling but others hardly recognise it.....”



# Paradigm Shift

The digital era is changing the dominant paradigms for how organisations (universities) function.

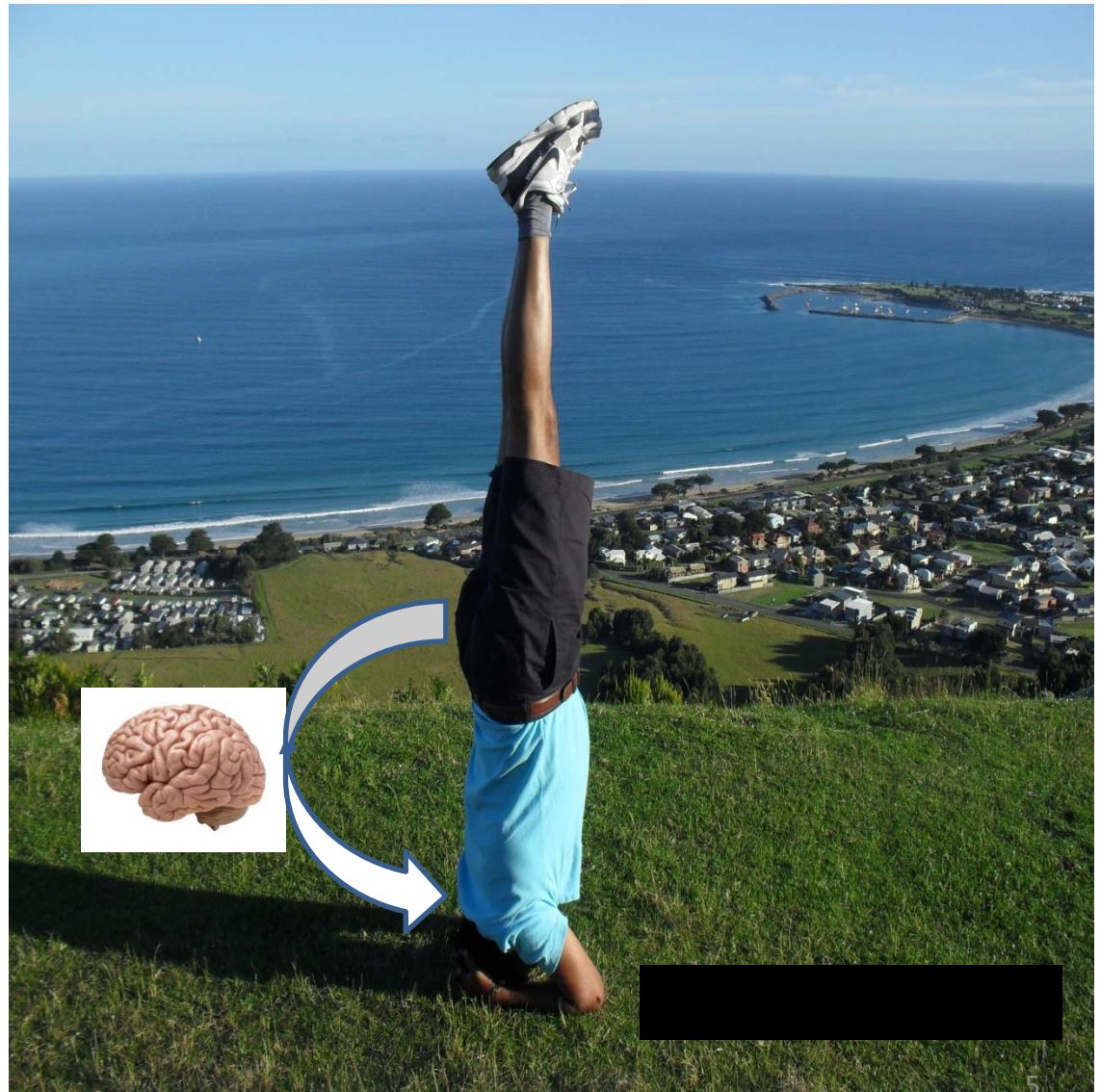
Today, our economies are shifting, and the new models are ones of learning and innovation, of entrepreneurship, of creativity and of global collaboration.



These factors are combining to establish groundbreaking conditions for deep learning to take off on a massive scale.

Are we still working for little factories producing standardised human 'products' ?

# Need for an up-side-down view!

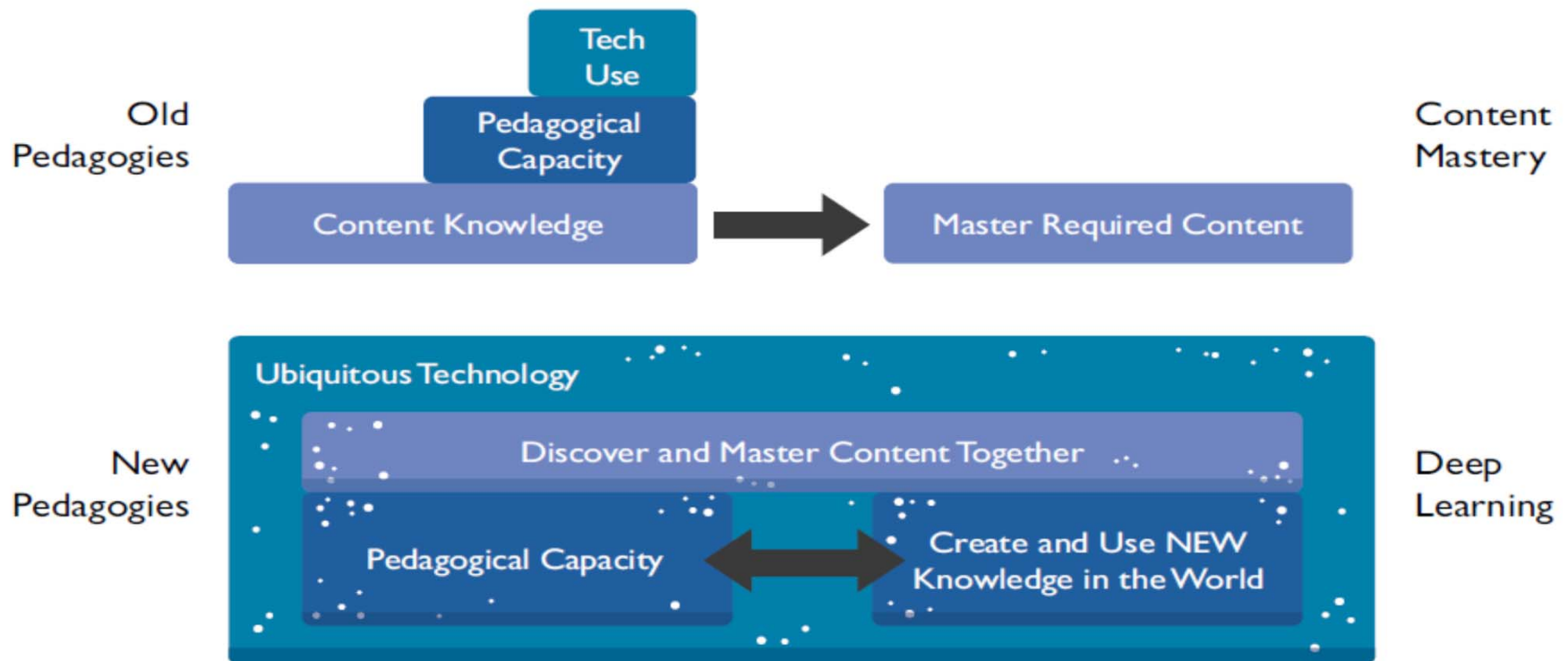
Rather than an incremental or 'augmentalist' change, we need a radical change in our approach to teaching!



Threats	Pedagogical Implications
<p>Reduction in public funding to universities.</p>  <p>Reliance on more international students</p>	<p>This results in a multicultural, truly global student cohort in our classroom</p>
<p>Expansion of the actual-virtual interfaces to the business and social world alike</p>  <p>Problems in managing the constant oscillation between actual and virtual</p>	<ul style="list-style-type: none"> <li>• Seamless combination of actual and virtual components of knowledge imparting processes</li> <li>• Modern day businesses need graduates who are capable of managing the interface between virtual components (social media marketing, social media profile, virtual payment gate-ways etc.) and the actual components (delivery of the tangible products, repairs, customer service etc.).</li> <li>• Implications of the impact of virtual 'behaviours' on the actual interactions</li> </ul>

# Old and New approaches

Figure 1: How the New Pedagogies are Different



Fullan, M. & Langworthy, M. (2014) *A Rich Seam: How New Pedagogies Find Deep Learning*, London: Pearson

# Radical Shift

*students' brain activity is nearly non-existent during lectures - even lower than when they are asleep. Lectures equal brain "flatlining" and,....students "are more asleep during lectures than when they are in bed!"*

The research on brain activity by Rosalind Picard and her colleagues at MIT's Media Lab

*'a new model of learning partnerships between and among students and teachers, aiming towards deep learning goals and enabled by pervasive digital access'*



# This radical shift is not about..

The new pedagogies are not as simple as 'flipped' classrooms or MOOCs (Massive Open Online Courses) where content information and existing knowledge are 'delivered' online rather than through textbooks or live in classrooms.

"simply adding a layer of expensive tools on top of the traditional curriculum does nothing to address the learning needs of modern learners."

The new pedagogies are much more than the 'flipped model' and other ad hoc innovations.

**"The new pedagogies require students to create new knowledge and connect it to the world by using the power of digital tools"**

So folks..

*Don't start with the technology. Start with pedagogy and let the students help you see how they'll fit technology into effective teaching and learning.*

(Max Drummy, Professional Learning Leader,  
Department of Education, Tasmania, Australia )

# I am an 'Activator' not a 'Facilitator'

It was found that teacher as an 'activator' garners more than three times the effect of the 'facilitator' (Hattie. J. (2009). *Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Achievement*. London: Routledge).



Teacher should take a highly *proactive role in driving the learning process forward, using whichever strategy works for a specific student or task*. Such teachers

- do not 'let the students learn on their own' but instead help them master *the difficult and demanding process of learning*.
- *have highly-developed pedagogical capacities*.

# Let's ask some questions about our teaching approaches

Asking the right questions is more important than giving right answers!

Asking the right questions ensures effectiveness (achieving goals)

Giving right answers to wrong questions may be 'efficient' but not effective!

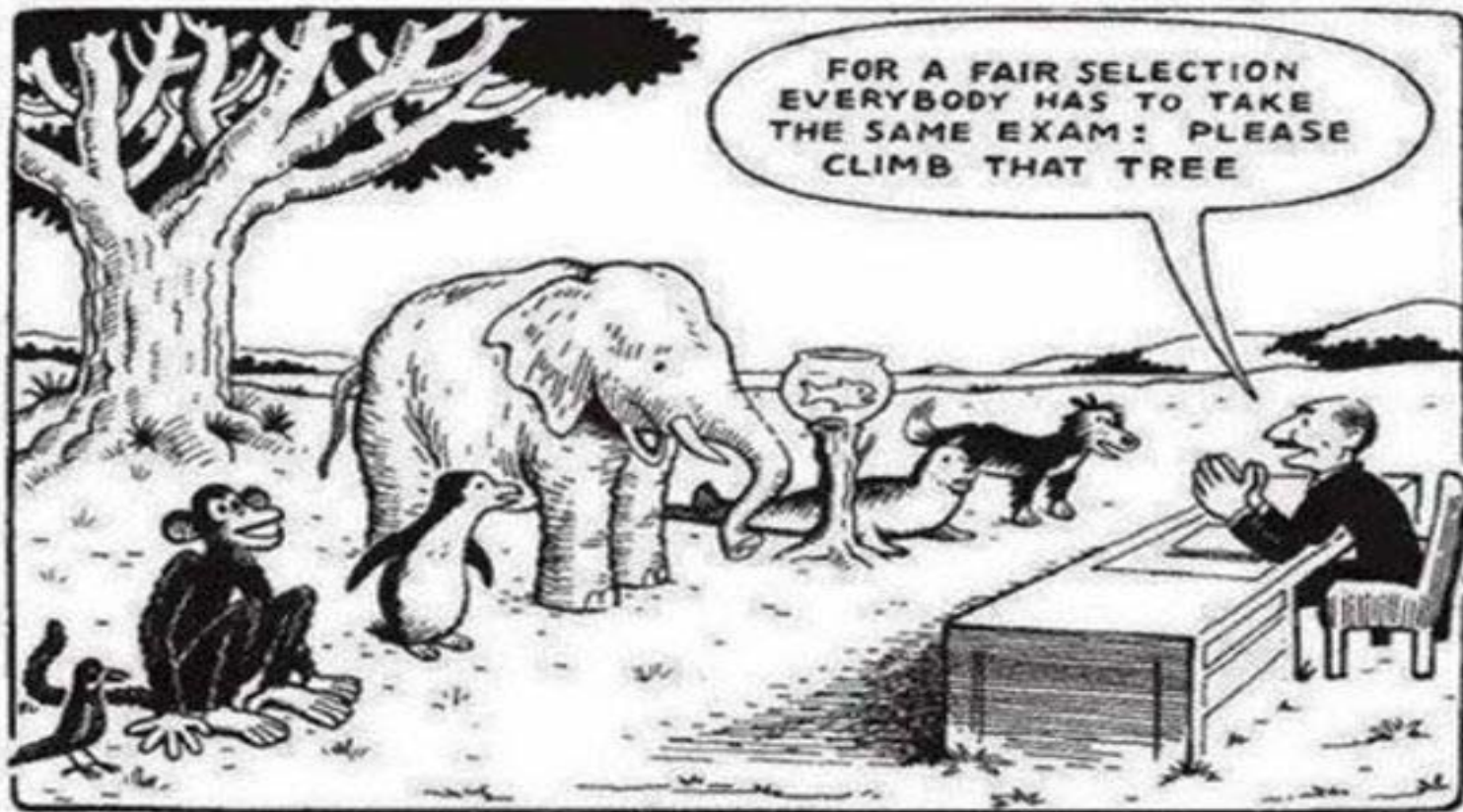
# Can Technology fully replace pedagogy?

Larry Cuban (2013) has documented that technology has had little impact over the past 50 years!!.

- Orrin Murray and Nicole Olcese at Pennsylvania State University analysed the 30,000 applications categorised as 'educational' in Apple's iTunes U.
- They concluded that “among applications categorised as 'educational', few, if any, provide more than consumption modes.”
- This characterisation holds true not just for Apple's educational applications but for the majority of educational applications of past decades.
- Even the highly-touted Khan Academy or the emerging MOOCs, as valuable as they may be for supporting traditional learning goals, do not begin to leverage technology for new pedagogies and deep learning.....

# 'Radical' Questions to energise teaching

1. How do we design a set of fair assessments to render justice to a group of students who 'understand' what you talk but you do not necessarily understand what they 'talk' ?
2. How can I 'immerse' in deep learning a culturally diverse group of students ?
3. How do we engage a cohort of students who are differently able in their language competencies and cultural orientations?
4. How do we shift the skill set from 'individual' to 'collective'?
5. How do we make the process of learning the learning itself?



How do we design a set of fair assessments to render justice to a group of students who 'understand' what you talk but you do not necessarily understand what they 'talk' ?

*Customised Assessments?*

*Mass customisation is now possible through* 15 *technology!!*

# How to 'immerse' students in deep learning?

## **S Korean dies after games session**

**A South Korean man has died after reportedly playing an online computer game for 50 hours with few breaks.**

The 28-year-old man collapsed after playing the game Starcraft at an internet cafe in the city of Taegu, according to South Korean authorities.

The man had not slept properly, and had eaten very little during his marathon session, said police.

Multi-player gaming in South Korea is extremely popular thanks to its fast and widespread broadband network.



Online gaming is treated like a sport in South Korea

This is an extreme case!. Our bodies explode when we immerse deeply in an activity!

How can we effectively use gaming to deeply engage and 'immerse' students?

# Pedagogical significance of wikis: towards gaining effective learning outcomes

Chandana Rathnasiri Hewege and  
Liyanage Chamila Roshani Perera

*Faculty of Business & Enterprise, Swinburne University of Technology,  
Melbourne, Australia*

Pedagogical  
significance  
of wikis

51

## Abstract

**Purpose** – The purpose of this paper is to explore the effectiveness and pedagogical implications of integrating wikis into the curriculum and the subsequent learning outcomes of a group of Net-Gens who enrolled in an International Marketing course. The research problem of the study is: “What are the learning outcomes and pedagogical implications arising from the use of wikis?”

**Design/methodology/approach** – A qualitative research methodology supported by the NVivo data analysis software was employed. A triangulated approach to collecting data was used. First, the content of the three student-generated wikis and the written text of 30 student assignments were analysed by using Nvivo software to identify emerging themes pertaining to wiki-based learning outcomes. Second, a critical incident method was employed where students were asked to describe two positive experiences and two negative experiences related to the wiki pedagogy. Third, in-depth interviews were conducted with six members of the teaching panel of the course to further understand the pedagogical implications of wikis.

**Findings** – Consistent with previous studies, it was found that wikis promoted collaborative learning, organic discussions and independent thinking. Against previous studies, however, it was found that students adapted to wiki-based pedagogy very well, and with little difficulty. There were differential levels of student engagement in wikis, and that occasionally wikis resulted in stagnated discussions, unless clearly aligned to the curriculum.

**Practical implications** – A well thought-out alignment of wiki assessments with other learning activities has the potential to engage Net-Gens. In order to keep students enthusiastically engaged in wiki discussions, it is important to embed wiki-based activities into other learning activities. Understanding that there is a “spill over” effect from one learning activity to another is important.

**Social implications** – The outcomes were especially beneficial to non-English speaking background (NESB) students who are often inhibited in their responses in typical classroom settings.

**Originality/value** – While research has focussed on the use and functionality of wikis in curriculum design, there is a paucity of work on their pedagogical implications. This paper looks at the implications of a “wiki-based pedagogy” which assumes an “emancipatory”, partially-“constructivist” paradigm of learning, where teachers should be ready to ‘loosen the controls of the conventional teaching-centred learning environment’.

**Keywords** Wiki pedagogy, Learning outcomes, Net-Gens, NESB students, Curricula development, Web 2.0

**Paper type** Research paper



## **Wiki pedagogy: A digital bridge connecting International and Local Students' learning experiences in an Australian University**

Chandana Rathnasiri Hewege and Chamila Roshani Perera

Faculty of Business and Law  
Swinburne University of Technology  
Hawthorn VIC 3122  
Australia

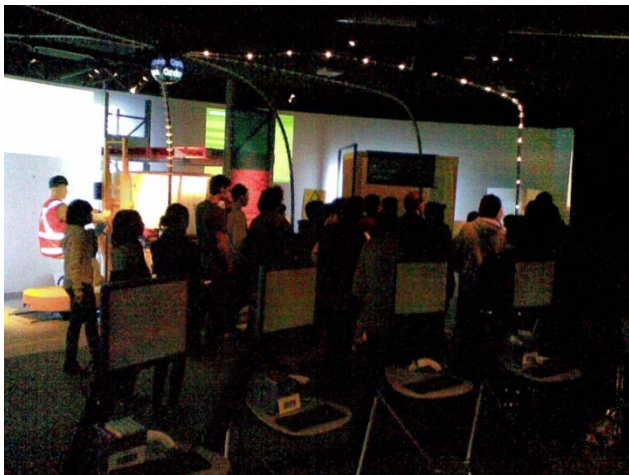
[chewege@swin.edu.au](mailto:chewege@swin.edu.au) and [chamilaperera@swin.edu.au](mailto:chamilaperera@swin.edu.au)

### **Abstract**

This study examined how successfully wikis can foster an effective learning environment for international students in Australian universities. Language difficulties and cultural incompatibilities inhibit collaborative learning among international students resulting in a division between local and international students. Having been informed by engagement theory, data were collected through a three-phased mixed research method; (1) a critical incident method, (2) a content analysis, and (3) an online survey. Three thematic categories; *(1) Learning through collaborations, (2) I am heard in wikis, (3) Resistance to wikis* are found at the early phase of data analysis. The online survey found a positive relationship between wiki engagements and student performance. Further, international students who seem to engage in wikis more than local students do, perceive wikis as an effective tool which facilitates their collaborative learning and engagement in meaningful discussions. These findings guide the integration of wikis in higher education and extend the existing theoretical frameworks of wiki pedagogies.

# Deep Learning Tasks

- Re-structure students' learning of curricular content in more challenging and engaging ways made possible by digital tools and resources.
- Give students real experiences in creating and using new knowledge in the world beyond the classroom.

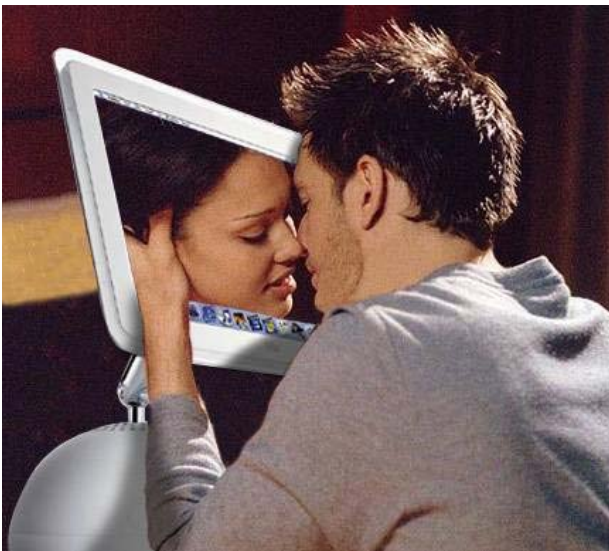


My students participating in a simulation session learning how global supply chains operate

# Actual-Virtual Interface



“Our results indicate that just five minutes of role-play in virtual environments as either a hero or villain can easily cause people to reward or punish anonymous strangers,” says lead researcher Gunwoo Yoon of the University of Illinois at Urbana-Champaign.



# Concluding remarks..

- **Be an Activator not a Facilitator**
- **Try to 'immerse' not 'engage' students**
- **Rather than an incremental or 'augmentalist' change, we need a radical change in our approach to teaching!**
- **Radical shift from content mastery mode to deep learning**
- **Technology cannot fully replace pedagogy**
- **A teacher can energise him or herself, teaching and the learning process by immersing students in deep learning**
- **Create knowledge and connect it with the world through technology**
- **Seamless combination of actual and virtual components of knowledge imparting processes**
- **Focus on the skills that prepare students to manage the actual (real) and virtual interface**