# Challenging HE Practices: Technology Catalysing Change in Post-Covid Times



Emeritus Professor Bob Fox UNSW SYDNEY AUSTRALIA

## Challenging HE Practices: Technology Catalysing Change in Post-Covid Times

### Context

- Systemic changes initiated *prior to COVID* accelerated during COVID pandemic - consolidated post-COVID
- COVID times broader acceptance of digital learning
- Opportunities for sustained innovation in L&T practices
- Digital focus *demands* adjustments to how L & T is conducted
- This seminar:
  - reviews cases that focus on improving the quality of learning with a focus on curriculum/course design & capacity building in sustaining systemic change & innovation in L & T with and through technology
  - explores experiences shared & lessons learnt that could be adopted/adapted within other institutions in a post-COVID pandemic era



# Leadership Models: UNSW as 'Catalytic Integration' Institution

### Models:

Technological Adoption, Catalytic Integration, Cultural Integration

### **Technological Adoption Model**

- Limited institution tradition or culture in terms of distinctive vision/mission
- Enhancing teaching effectiveness & ICT competence of students
   main objectives of ICT implementation
- Clearly defined targets & schedules for achieving specific ICT competency & its demonstration in L&T

(Law et al, 2000, p.121)

### Leadership Models: UNSW as 'Catalytic Integration' Institution

### **Catalytic Integration Model - UNSW**

- Visionary leadership & institutional philosophy & strategy, engages institution in continuous reform process, engaging staff/students in the process as members of a *learning* organization
- Use of ICT in L&T is deliberate & designed as integral to the curriculum consistent with institution ethos
- Leadership key change agent with clear vision & implementation strategy, with staff PD focusing on curriculum tailoring & pedagogical innovation as key elements

(Law et al, 2000, p.121)



# Leadership Models: UNSW as 'Catalytic Integration' Institution

### **Cultural Integration Model**

- Strong cultural & historical foundations that results in a distinctive institution vision focusing on student empowerment
- Well-established student organisations & good multi-age interactions as an "institutional tradition"
- Realization of student's individual potential & development of self-actualization, life-long learning ability is emphasized the most
- ICT is mainly seen as an empowering tool both for students & teachers

(Law et al, 2000, p.121)

# UNSW2025 Strategy: Educational Initiatives, Technology Catalysing Change

- UNSW vision to be Research & Education Intensive
- 65,000 students & 1000+ award programs & 7500 courses
- UNSW Strategic Plan 2015-2025. Entire institution engaged in development, continuous review process, with staff, students & partners - essential members of the learning organization & technology & technological practices as catalyst for change
- Large extra funding for educational & online initiatives across 10 yrs. Projects adjusted in 2019/2020 due to COVID
- Systemic approach to change & central role of:
  - capability building & elevating the status of L&T
  - technology solutions for improving learning
  - curriculum review/revise L & T related policies & guidelines



## Capability Building: Education Focussed Careers



# Teaching > Development > Professional Development

#### **Education Focussed Careers**



```
Are you looking for EF Central—the hub of the EF community?
```

#### Professional Development

Beginning to Teach Foundations of Learning & Teaching Academic Mentoring Self-paced learning modules Education Focussed Careers Plus HEA fellowships

#### **Events & news**

Nexus Fellow Roles: Q&A Session
 LET'S Meet T2 2023

Established pre-COVID with growth during and post COVID

> 450 academics to <u>Education Focussed Careers</u> (EF) 5yr + contracts to reach "critical mass" for change

### Capability Building: Education Focussed Universities

**Go8 Universities with Education Focussed Models** 



#### **International Universities with Education Focussed Models**

	VO CO ES RVAND	King's London University of Landon	UBC	⁺UCL		Massachusetts Institute of Technology	MANCHESTER 1824 The University of Manchester	Duke
University	Harvard University	King's College London	University of British Columbia	University College London	National University of Singapore	Massachusetts Ins titute of Technology	University of Manchester	Duke University
Top EF Level	Professors of the Practice	Professor	Professor of Teaching	Teaching Fellow	Associate Professor	Professor of Practice	Professor	Professor of Practice



## Capability Building: Education Focussed Promotions at UNSW in 2022

8 promotions to Lecturer13 promotions to Senior Lecturer5 promotions to A/Prof2 promotions to Prof

4 new HEA Fellows (HEA Fellows)
5 new HEA Senior Fellows
10 UNSW VC Awards
3 Students Choice Awards
2 Exemplary Teaching Practice Awards
7 new SEA Fellows (Scientia Education Academy Fellows)



# Capability Building: Education Community Initiatives

- Communities of Practice (CoPs) over 600 academics involved. 13 CoPs in: digital assessment, student feedback, academic integrity, course design, online learning, etc using Microsoft Teams and F-2-F
- Special PD workshops & seminars, Annual EF Retreats & Symposia, blogs & resources on hot topics eg <u>ChatGPT DVC</u> <u>Academic blog</u>; Google's BARD (released 15 May 2023), AI, assessment & academic integrity; assessment security; implications for returning to paper-based assessments
- Visiting Teaching Fellowship Scheme
- Design & development of physical learning spaces
- Changes in education and program policies and procedures

# UNSW: curriculum framework embedded into education policies: ICF

Policies & Procedures- key during COVID

- 1. UNSW Program Design and Delivery Policy
- 2. <u>UNSW ICF</u>
- 3. UNSW Program Design Procedure
- 4. UNSW Program Delivery Procedure



(Fox 2015)

# UNSW: RASE as a model linked to education policies & the ICF







### **Micro-credentialing - Quality Assured**

Integrated Curriculum Framework with RASE







### Micro-credentialing: Agile & Hybrid Modular Design Sample

Micro-credentialing leading to:





# An Integrated Approach – Aus \$77 million



Mark King, 2014-2020

# An Integrated Approach – Aus \$77 million

- **Digital Uplift**: design, develop **660** online, hybrid & blended courses
- **Digital Assessment System**: trial digital assessment platforms & assist in developing new policies
- Scientia Education Academy: showcase excellence in teaching, cultivate a shared community of practice, leadership and inspiration in learning and teaching
- **1st Year Student Experience**: implement a plan for a distinguished and supportdriven 1st year educational experiences
- **Students-as-Partners**: provide opportunities for students to *partner* in the creation of knowledge and development of teaching improvements and innovations
- Online Community App: develop student-led learning digital spaces
- Summative Peer Review Process: establish a process to generate evidence of teaching practice as part of a compulsory component in academic promotion and to compliment individual teaching awards

### Learning lessons from Innovative Practices: Dimensions of Educational Innovation

### Definition

• 'Educational innovation' defined as:

an enhancement<sup>1</sup> of existing educational practices

<sup>1</sup> Enhancement: 'improving the quality of learning opportunities'

### Purpose

- Identify innovative educational practices using technology
- Develop a dimensions of educational innovation framework to be used as a professional development tool for teachers; for peer reviews; to monitor change & innovation in educational practices in an institution

### Learning lessons from Innovative Practices: Signature Pedagogies in the Professions

Signature pedagogies – what is innovative in one discipline may not be in another

Signature pedagogies shaping existing practices:

- 1<sup>st</sup> yr Law semicircular theatre facing one another, case dialogue method, individual students asked ?s about a case, analytical reasoning
- 1<sup>st</sup> yr Engineering seats all face front, teacher works through displayed maths equations. Discussion by students *not* typical except in post lecture study group sessions
- Engineering design studio students in small groups identify online design solutions. Students discuss, experiment and collaborate with each other (Shulman, 2005)

### Learning lessons from Innovative Practices: Dimensions of Educational Innovation

### **5** Dimensions

- Teacher roles
- Student roles
- Communities
- Technologies
- Impact

### **5** Levels

- 1. Existing practices
- 2. Some new elements
- 3. Emergent practice
- 4. Innovative
- 5. Most Innovative



(adapted Law et al, 2011, Fox, 2020)

### Learning lessons from Innovative Practices: Uses for the Dimensions of Innovation

### **Professional Development and Recognition**

- Online templates: Dimensions of Innovation for teachers to selfassess their own levels of innovation & change over time
- Template used in workshops: self- & peer-assessment of levels of innovation
- Completed templates used as a catalyst in academic career conversations with mentors; as evidence for HEA & L&T awards & to include in personal Teacher ePortfolios

### Identifying Innovation & Change in Educational Practices

- individual courses
- groups of courses in faculties, across UNSW & beyond

### Experiences Shared & Lessons Learnt: Informing a Post-COVID HE Era

During COVID-19 many excellent practices/resources/innovations How can we best sustain & transfer beyond the COVID pandemic era?

- Sharing good/innovative practices is a proven way to enhance L&T (e.g. Law, Yuen, Fox, 2011)
- Importance of good mechanisms/groups eg EF & EF CoPs, SEFs, Faculty & PVCESE experts, services & committees (Fox, 2007).
- Power of frameworks/models to help us understand, summarise, identify, compare, good/innovative practices. To capacity build & identify individual and our peers' enhancements & progression in more systemic ways. We need frameworks/models to collate, identify & connect our multiple & spread resources
- Power of program related policies and changes



### Conclusion: Challenging HE Practices: Technology Catalysing Change in Post-Covid Times

Top 3 Takeaways of what have we learnt about the new normal

- 1. Systemic approaches to change during/beyond COVID-19
- 2. Shared design models/frameworks/mental models/policies
- **3. Staff capability building across the institution** key to ensure use of shared frameworks, new pedagogies, good & innovative practices

Thank you



#### References

- Churchill, D., King, M, & Fox, B. (2013). Learning design for science education in the 21st century. *Journal of the Institute for Educational Research, 45* (2), 404-421.
- Fox, B. (2007). ICT Use During SARS: Teachers' Experiences. Journal of Technology and Teacher Education, 15(2), 191-2005. Waynesville, NC USA: Society for Information Technology & Teacher Education. Retrieved May 24, 2021 from <u>https://www.learntechlib.org/primary/p/19813/</u>.
- Fox, R. (2015). The rise of open and blended learning. In D. Wong, K.C. Li, & K.S. Yuen (Eds.), *Studies and Practices for Advancement in Open and Distance Education* (pp. 93-103). Hong Kong: Hong Kong Open University Press.
- Fox, R. (2020, 27 June). Educational Innovation Beyond Technology: A Tool for Teacher Capability Building in Innovative Practices. Invited Keynote, 2020 International Conference on Artificial Intelligence and Education (ICAIE 2020), June 26-28, Tianjin, China.
- Law et al (2000) Changing Classrooms & Changing Schools: A Study of Good Practices in Using ICT in Hong Kong Schools. CITE, HKU.
- Law, N., Yuen, H.K., & Fox, R. (2011). Educational Innovations Beyond Technology: nurturing leadership and establishing learning organizations. New York: Springer.
- Shulman, L.S. (2005). Signature pedagogies in the professions. Daedalus, 134 (3), 52-59.