

# **Supporting and Enhancing University Teaching and Learning**

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## **Some Important Findings and How They Are Being Applied**

Gary Poole

Centre for Health Education Scholarship



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# An Overview of Today's Session

- Part 1: An overview of past and current activity to support teaching and learning
- Part 2: What has come of all this?
- Part 3: What are we doing with all this knowledge about teaching and learning?



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# Part 1

## An Overview of Past and Current Activity to Support Teaching and Learning



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# In the United Kingdom

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Established in 1993

97 member institutions

<https://www.seda.ac.uk>



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# In the United States

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Advancing the Research and Practice of Educational  
Development in Higher Education Since 1976

1329 members

<https://podnetwork.org/about-us/>



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# In Australasia

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Higher Education Research and Development Society of  
Australasia



Established in 1972

Lists 16 other international organizations on its site



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## In Canada

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Established in 1981



130 members



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# Internationally

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**ICED**  
INTERNATIONAL  
CONSORTIUM FOR  
EDUCATIONAL  
DEVELOPMENT

Established in 1993

<http://icedonline.net>

[Member Organizations](#)



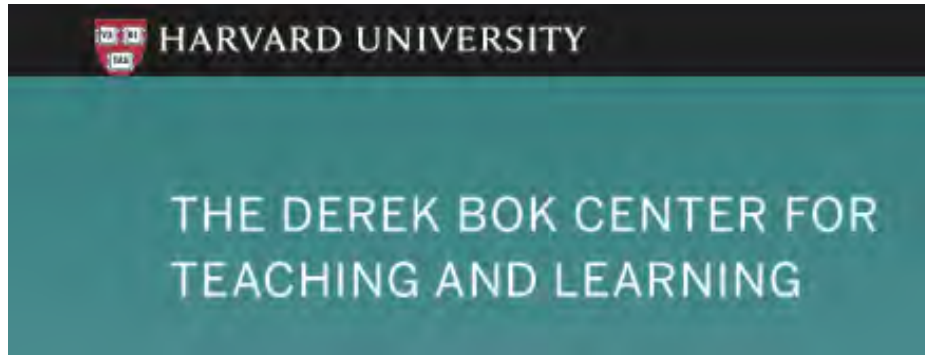
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## Some Institutional Examples

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<https://bokcenter.harvard.edu>



<https://vptl.stanford.edu>



## Some Institutional Examples

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Vancouver Campus

Centre for Teaching, Learning and Technology

<https://ctlit.ubc.ca>



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## Part 2

# What Has Come of All This?



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Over the history of these organizations, there has been a continual push to make teaching and the support of teaching more evidence-based.



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# A Proliferation of Scholarship

- Peer-reviewed journals on teaching and learning in many disciplines
- Reporting on systematic research conducted by faculty members on teaching and learning within their own classrooms and programs
- [A directory of teaching and learning journals](#)



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# **An example ...**

## **Threshold Concepts**



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# Definition

“A threshold concept can be considered as akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding something without which the learner cannot progress ... This transition can prove troublesome. Such a transformed view may represent how people “think” in a particular discipline.”

Meyer & Land, 2003



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# Definition

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# Threshold Concepts

- **Transformative** — they change the way a student looks at things in the discipline
- **Integrative** — they tie concepts together
- **Irreversible** — can be challenged but not unlearned
- **Troublesome** — difficult or challenging to previous views
- Contributing to student's **identity**



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# Examples of Threshold Concepts

- Law
- Statistics
- Economics
- Precedent
- Probability
- Opportunity cost



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# Implications for Teaching: “Jewels in the Curriculum”

- Use threshold concepts to help edit out “superfluous” content
- Slow down for Threshold Concepts
- Carefully monitor understanding of Threshold Concepts
- Once understood, build other conceptual understanding using Threshold Concepts
- Spiral through them across the curriculum



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# Student engagement and high-impact practices

- First-Year Seminars and Experiences
- Common Intellectual Experiences
- Learning Communities
- Writing Intensive Courses
- Undergraduate Research
- Service Learning, Community Based Learning
- Internships
- Capstone Courses And Projects



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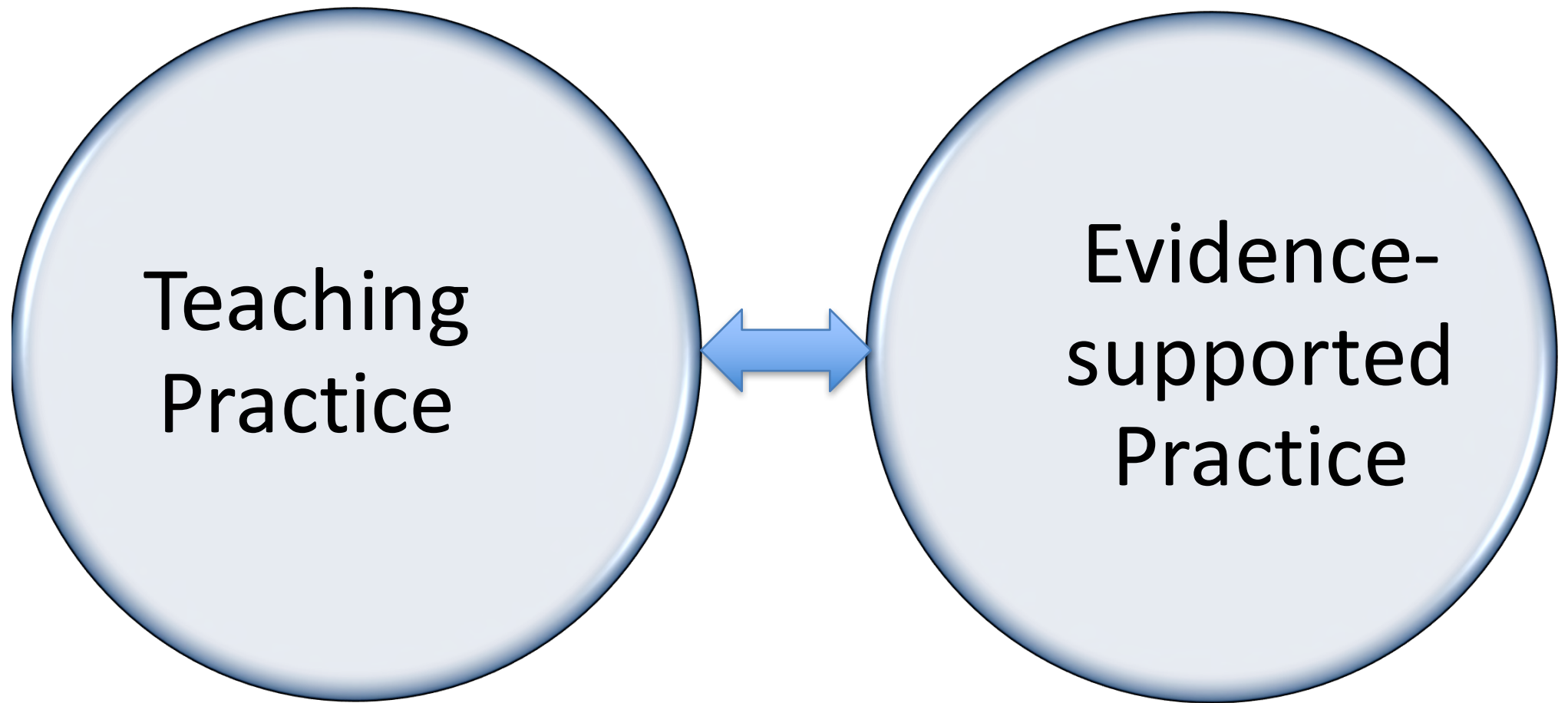
## Part 3

**What are we doing with all this knowledge about teaching and learning?**



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# Two Kinds of Explanations for the Gap

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- Logistic
- Psychological




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# Logistic Reasons for The Gap

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- Size and complexity of the research
- Ease of access to the research
- Help with translation of the research implications
- Situational constraints
  - Class size
  - The tyranny of coverage
  - Limitations of infrastructure



Yet,  
knowledge  
of good  
practice is  
spreading



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# Psychological Reasons for the Gap

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- We are not generally receptive to change that brings into question our
  - core beliefs/ personal theories
  - highly valued heuristics
  - identities



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# The Adoption-Invention Continuum

(Henderson & Dancy, 2008)

Adoption	Adaptation	Reinvention	Invention



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(Henderson & Dancy, 2008)

Adoption	Adaptation	Reinvention	Invention
Materials and procedures implemented as given			



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# The Adoption-Invention Continuum

(Henderson & Dancy, 2008)

Adoption	Adaptation	Reinvention	Invention
Materials and procedures implemented as given	Materials and procedures modified somewhat by instructor		



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# The Adoption-Invention Continuum

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Adoption	Adaptation	Reinvention	Invention
Materials and procedures implemented as given	Materials and procedures modified somewhat by instructor	Instructor changes materials and procedures significantly	



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Developers expect this			



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Developers expect this		Instructors expect this	

This is the most common pattern, sometimes consistent with evidence, sometimes contradicting it.



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# The Gap persists when

## Researchers and developers

- Fail to understand the logistic and psychological barriers to change
- Fail to take context into account
- Fail to see their work in terms of partnerships and networks
- Stress adoption over adaptation or reinvention

## Instructors

- See new ideas as a threat to their professional identity
- Put personal investment in heuristics above the potential for continual improvement
- Seek out others who will confirm their beliefs without ever testing them
- Stress invention over adaptation or reinvention



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# The Gap will be reduced when

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- Personal truths are interrogated but also respected
- Educational research is treated as a modifiable resource
- That modification is the result of a partnership between faculty developers and instructors
- Small yet significant networks of instructors are supported



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# How Teaching Improves

- Roxa & Martensson (2009; 2012)
  - instructors form small significant networks to discuss teaching; these networks influence practice.
  - when academic cultures support scholarly approaches to teaching and learning, more conversations occur.



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# Significant Networks

- A network consists of individuals and the interactional links between them.
- Network participants come together on a common objective
- Networks allow for the exchange of resources and for capacity building; they allow members to collaboratively develop knowledge



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# Significant Conversations

- Private
- Trustful
- Intellectually intriguing

*“It is likely that these conversations open up the possibility of constructing and maintaining—and perhaps partly changing—an understanding about the realities of teaching.” (p.555)*



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