

Enhancing Undergraduate Engagement through research and inquiry

New South Wales and ACT Regional Roundtable
23rd September 2009

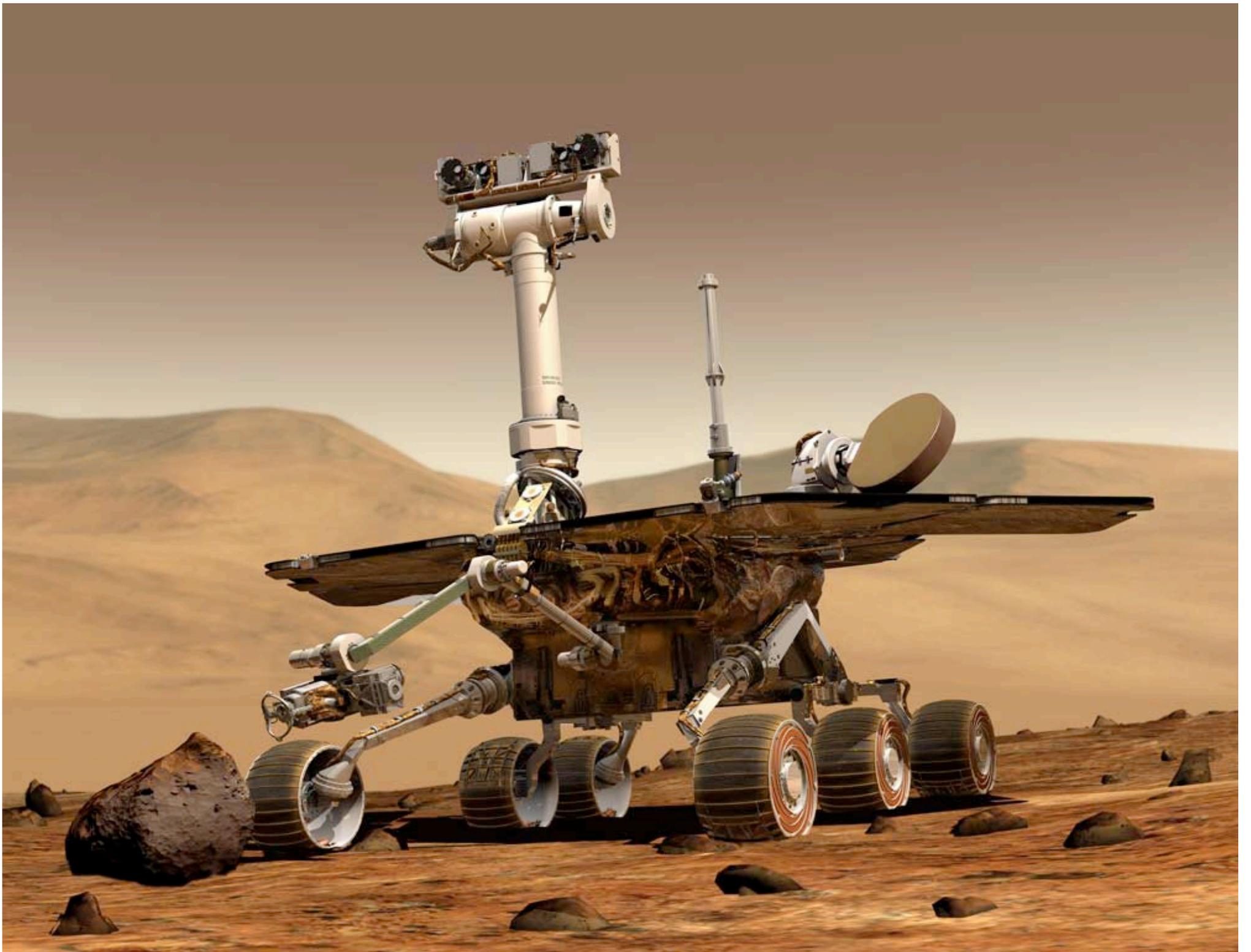


Welcome to the Learning Café

- 🧠 As the name suggests, a learning café is a place where you come to engage in conversation leading to learning
- 🧠 We suggest that you sit with someone you don't know
- 🧠 Start by introducing yourself and talking about where you are from, why you are here and any initiatives in engaging undergraduates in research and inquiry that you are involved in

Welcome to the Learning Café

- 🧠 Examine the themes and issues on the handout
- 🧠 In your group: choose and discuss the issues that most concern the group. If there are issues that are not on the list, please feel free to introduce these into the discussion
- 🧠 On your own: identify two particular challenges you personally face
- 🧠 In your group: share these and agree on the three most common
- 🧠 Put these on a flipchart





Ben Gulak: Uno cycle



Rafael Smith: The Uber Shelter



Aim of the Fellowship

To enhance student engagement in learning through supporting the development in Australia of undergraduate research and inquiry

Definition of undergraduate research and inquiry

“An inquiry or investigation
conducted by an
undergraduate student that
makes an original intellectual
or creative contribution to the
discipline.”

(Beckman & Hensel, 2007)

Definition of undergraduate research and inquiry

“[An] inquiry or investigation or a research-based activity conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline and/or to understanding.”

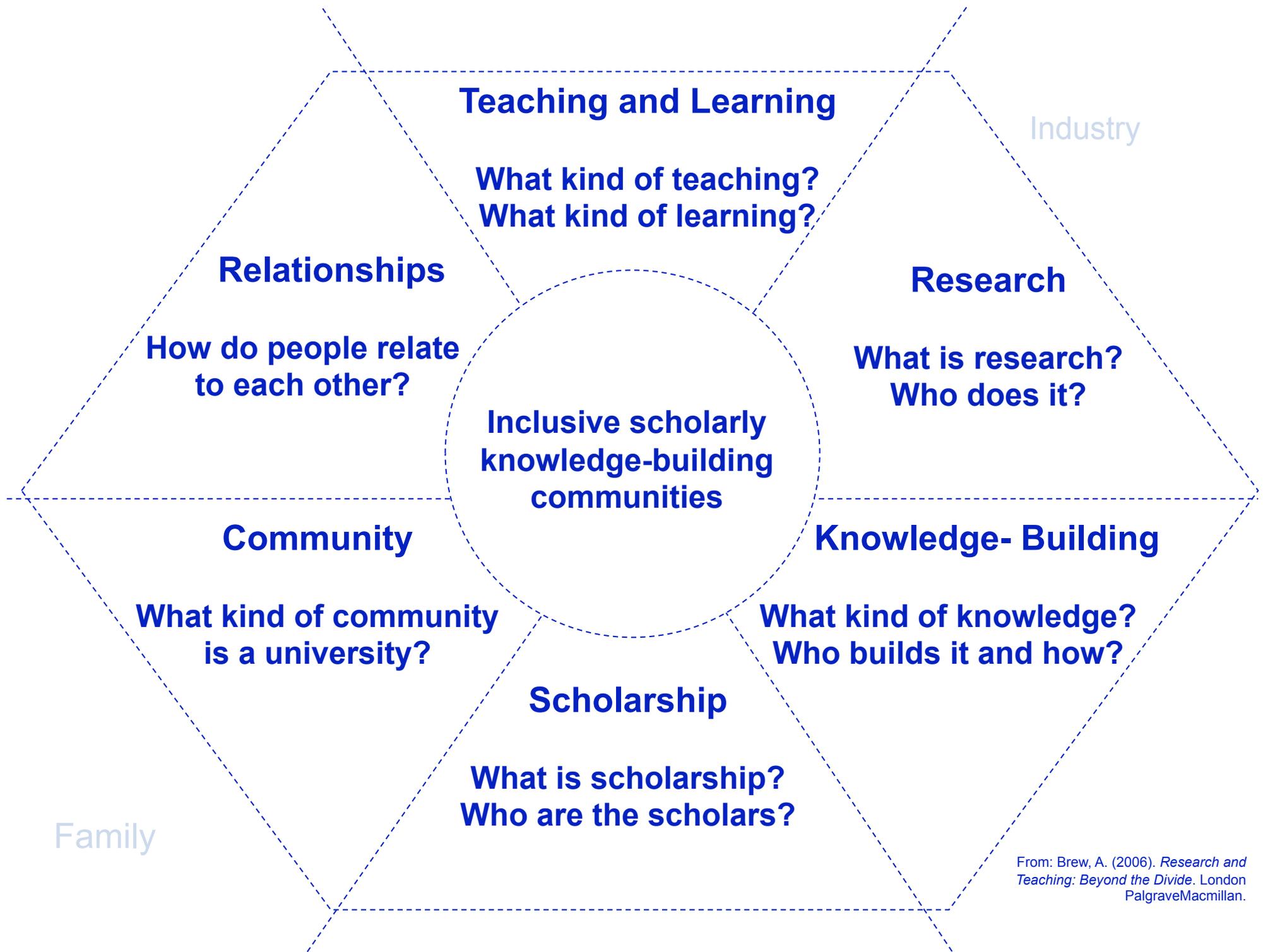
(following Beckman & Hensel, 2007)

What students gain

“In sum, the literature converges on a broad set of benefits as arising from engagement in authentic research. Notably congruent are: gains in confidence and in establishing collegial working relationships with faculty and peers, increases in students’ intellectual and practical understanding of how science research is done; students’ greater ability to work and think independently from faculty; and the role of UR both in helping students to assess the fit of research as a career and to clarify career and graduate school plans. Across the , these results underscore UR experience as offering a constellation of gains that collectively reflect students’ personal, intellectual and professional growth.” (Hunter, Laursen, Melton, Seymour, Thiry forthcoming)

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From: Brew, A. (2006). *Research and Teaching: Beyond the Divide*. London PalgraveMacmillan.

Program

 Conversations

 Showcase examples

 Artifacts, resources, protocols

Program

10.45 am Showcase Presentations

- 💡 *Using inquiry-based exercises to engage first-year geoscience students.* Kelsie Dadd
- 💡 *Real research opportunities for undergraduates.* Joanne Elliot

11.15 am Morning Tea

11.30 am Showcase presentations continued

- 💡 *Viet Nam Field School: Giving undergraduates "real" research experiences.* Richard Baker
- 💡 *Re-invigorating the teaching-research nexus through applied fieldwork on Indigenous tourism in the Northern Territory.* Sandie Suchet-Pearson,
- 💡 *Bridges to Learning: Student Enquiry in First year Engineering.* Tim McCarthy
- 💡 *Applied Statistics: A second year research course.* Peter Petocz

1.00 pm Lunch at Learning Café with a Poster Browsing

1.45 pm Guest presentation

- 💡 *Strengthening the link between research and practice in the first-year media arts curriculum.* Dr Denise Wood

2.15 pm Learning Café with afternoon tea served at 2.45 pm to explore particular artifacts, protocols and resources that have been collected

3.45 pm Plenary session

4.30 pm Close

Showcase Presentations

Using inquiry-based exercises to engage first-year geoscience students. Kelsie Dadd

Real research opportunities for undergraduates. Joanne Elliot

Morning Tea



Showcase presentations continued

Viet Nam Field School: Giving undergraduates "real" research experiences. Richard Baker

Re-invigorating the teaching-research nexus through applied fieldwork on Indigenous tourism in the Northern Territory.
Sandie Suchet-Pearson,

Bridges to Learning: Student Enquiry in First year Engineering.
Tim McCarthy

Applied Statistics: A second year research course. Peter Petocz

Lunch at Learning Café with Poster Browsing



Guest presentation

Strengthening the link between research and practice in the first-year media arts curriculum. Denise Wood

Learning Café

(afternoon tea served at 2.45 pm)

The purpose of this session is to provide an opportunity to explore the resources, artifacts and protocols that have been collected during the Fellowship

Please add in any resources you have brought

Suggested procedure

- 🧠 Begin by sharing the CHALLENGES that you identified this morning
- 🧠 Browse the resources and find a resource that you could adapt and use/adapt to meet an identified challenge. Use the list of resources to locate specific artifacts
- 🧠 Discuss in your group how you could use/adapt the resource
- 🧠 Contribute to the list of what additional resources would be useful?

For the plenary...

🧠 Present one/the best new idea you have come across today

🧠 Indicate how you might use/adapt this idea in a particular context

For the future...

- ❁ This roundtable is one of five being held in Australia
- ❁ These are being followed by the first Australian Summit on the Integration of Research Teaching and Learning
- ❁ What other activities or events or initiatives would move undergraduate research and inquiry forward?

Further information

http://www.mq.edu.au/ltc/alte/ug_research

- [Search](#)
- [Add](#)

References used in this presentation

- **Picture of Mars Rover:** From Jet Propulsion Laboratory, California Institute of Technology: mars.jpl.nasa.gov/.../20031104a.html
- **Picture of Uno cycle by Ben Gulak**
<http://www.nytimes.com/2009/01/04/education/edlife/ideas-Uno-t.html?ref=edlife> New York Times article: An Easy Ride Around the Crowd of Old Polluters
- **Uber shelter by Raphael Smith:**
<http://www.nytimes.com/2009/01/04/education/edlife/ideas-ubershelter-t.html?ref=edlife>
- Beckman, M., & Hensel, N. (no date). Defining Undergraduate research. Carnegie Foundation for the Advancement of Teaching and Learning, Leadership Project on Undergraduate Research and the Scholarship of Teaching and Learning.
- Hunter, Laursen, Melton, Seymour, Thiry (forthcoming 2010).
- Brew, A. (2006). *Research and Teaching: Beyond the Divide*. London PalgraveMacmillan.