# Report Advanced Study Colloquium 2015 11 July 2016

## 1. ASC Research theme

Changing personal epistemologies in teaching and teacher education: a focus on reflection and reflexivity

### 2. Organisers

Joanne Lunn Brownlee, Ph.D. Professor in Early Childhood Education, Queensland University of Technology, Brisbane, Australia

Florian Feucht, Ph.D. Associated Professor of Educational Psychology, University of Toledo, OH

Gregory Schraw, Ph.D. Professor of Educational Psychology, University of Nevada Las Vegas, NV

## 3. Aims and background

Teachers' personal epistemologies and epistemic cognition continue to be a significant topic in understanding teachers' instructional practices (Bendixen & Feucht, 2010; Brownlee, Schraw & Berthelsen, 2011; Maggioni & Parkinson, 2008). However, we know little about how to promote changes in epistemic cognition in the context of teacher education and professional development, although the theory of reflexivity offers an exciting new field of research. Collectively, personal epistemology and reflexivity require additional theoretical work to identify plausible conceptual frameworks, resolve measurement issues, explore change in epistemic cognition, and address how teachers' reflection and epistemic cognition might affect student learning and engagement. The ASC enabled key international and junior scholars with expertise across teachers' personal epistemology and reflection/reflexivity to identify new ways of thinking about the ASC topic "Changing personal epistemologies in teaching and teacher education: a focus on reflection and reflexivity." Thirteen international scholars participated in the ASC (see below) which was held prior to the main EARLI 2015 conference.

Participants & ASC Organizers <sup>2</sup>	Country
1. Jo Lunn Brownlee <sup>2</sup>	Australia
2. Florian Feucht <sup>2</sup>	USA
3. Gregg Schraw <sup>2</sup> (could not attend due to ill-health)	USA
4. Mary Ryan	Australia
5. Krista Muis	Canada
6. Ivar Braten	Norway
7. Helenrose Fives	USA
8. Michael Weinstock	Israel
9. Rainer Bromme	Germany
10. Dorothe Kienhues	Germany
11. Nathan Ziegler	USA
12. Lisa Ferguson	Norway
13. Julia Mascadri	Australia

#### 4. Outcomes

There are three main outcomes of the ASC: an innovative conceptual model for epistemic cognition change in teachers; an *Educational Psychologist* special issue; and an EARLI 2017 symposium.

- a) Innovative conceptual model. During the ASC, we worked as a whole group and in small breakout groups to discuss and refine the newly developed "3R Framework of Reflexivity" (Lunn Brownlee & Schraw, in press; Lunn Brownlee et al., 2016). The refinements made to this framework strengthened its appeal, applicability, and scientific rigour across a range of personal epistemology research agendas represented by the various researchers at the ASC. The ASC discussions were organised by four guiding topics which included:
  - 1. A comparison of theoretical frameworks of teacher reflection/reflexivity based on previous research; including strengths, weaknesses, and unique properties of each.
  - 2. The role(s) of reflection/reflexivity in teacher belief change that focuses on a theory-of-change regarding when, how and why beliefs change.
  - 3. How does reflection/reflexivity and belief change affect classroom practices?
  - 4. An agenda for future research on teacher reflection/reflexivity and belief change that addresses the respective roles of theory, training, and measurement.
- b) Educational Psychologist special issue. The new framework provided a deliberate point of reference for developing individual manuscripts for an Educational Psychologist special issue proposal which has been accepted. The title of the special issue is "Reflection and reflexivity: Changing personal epistemologies in teaching and teacher education". The ASC organisers will be the guest editors of this special issue. The special issue includes seven papers as follows:
  - An "Introduction and integration article" by the three guest editors: Feucht, Lunn Brownlee, and Schraw. This paper will summarize the purpose of the ASC, activities during the four-day meeting, and the key theoretical and research outcomes of the ASC as well as emphasize the value-added nature of the ASC to the field of teaching and teacher education.
  - Five papers (MS 1-5) by the participants will collectively address the guiding topics collectively and the "3R Framework of Reflexivity" (Lunn Brownlee & Schraw, in press; Lunn et al., 2016). These manuscripts will summarize current thinking on each key topic embedded within the extant literature. These manuscripts will also discuss methodological implications for research designs and measurement issues concerning future research agendas and more practical implications for teacher education and classroom practice. The content of each invited manuscript will include both a literature review of previous work and how the ASC colloquium went beyond this work to reconceptualize the role of reflection/reflexivity in relation to changing teachers' personal epistemologies. The following is a summary of each of the five papers.
    - MS-1 Title: Changing epistemic cognition in the context of teaching and teacher education: A focus on reflection and reflexivity.

Authors: Lunn Brownlee, Ferguson & Ryan.

Keywords: Changing epistemic cognition, reflexivity, reflection, teaching, teacher education.

MS-2 Title: The normative sources and epistemic implications of teachers' aims in dialogic teaching.

Authors: Weinstock, Lefstein, Pollack, Ryan, & Lunn Brownlee.

Keywords: Dialogic teaching, epistemic cognition, social epistemology, reflexivity, teacher talk.

MS-3 Title: Teachers' epistemic cognition in the context of dialogic practice: A question of calibration?

Authors: Bråten, Muis, & Reznitskaya.

Keywords: Epistemic aim, reliable process, deep understanding, argumentation, inquiry dialogue.

MS-4 Title: *Epistemic cognition in teacher reflexivity for classroom assessment activities.* Authors: Fives, Mascadri, et al.

Keywords: Teachers' epistemic cognition, classroom assessment, teacher beliefs, reflexivity, reflective practice.

MS-5 Title: Informed reflexivity: Enacting epistemic virtue.

Authors: Bromme, Kienhues, Ryan, Weinstock & Feucht.

Keywords: Reflexive thinking, epistemic virtue, epistemic cognition, active citizenship, teacher education, academic domains.

• A review paper from Barbara Hofer who will act as the discussant for the special issue manuscripts.

We anticipate the five manuscripts (MS-1 to MS-5) to be ready for blind review in November 2016. The invited commentary should be ready for review beginning January 2017 and the introduction beginning May 2017.

## c) EARLI 2017 symposium.

We will submit a symposium proposal for the EARLI 2017 conference to present our Special Issues papers directly to the EARLI audience. The symposium topic is "Teachers' epistemic cognition and professional learning". The papers presented will collectively argue that changes in teachers' epistemic cognition may take place through a process of reflexivity, which requires internal negotiations about how epistemic aims calibrate with teachers' approaches to learning and lead to reliable processes for achieving such epistemic aims.