### Title
Pedagogies for knowledge-building: investigating subject-appropriate, cumulative teaching for twenty-first century school classrooms

### Overview
In today’s fast-changing knowledge society, young people need to quickly grasp the ‘rules of the game’ for building different kinds of knowledge. This project will explore how teachers apprentice students into the principles for knowledge-building embodied by academic subjects using the multimodal and digital resources of modern classrooms. Through in-depth case studies of entire units in secondary school Science and History, the project examines how their distinctive epistemic and semiotic principles are unfolded through teaching practice. Its outcomes will advance theoretical and professional understanding by bringing together sociological and linguistic approaches to give crucial insights into how schooling can support lifelong learning.

### Funding bodies and amount
ARC Discovery - $360,241.00 (Administered by the University of Sydney)

### Research partners
Associate Professor K. Maton (Lead – University of Sydney), Professor J.R. Martin (University of Sydney), Professor Len Unsworth (ACU), Dr. S. Howard (Wollongong).

### Timeline/Duration
2013 – 2015

### Research Problem
To succeed in today’s knowledge society, young people need to quickly grasp the organising principles for building different forms of knowledge. This interdisciplinary project explores how teachers marshall the resources of modern classrooms to apprentice students into subject-specific principles for knowledge-building in Science and History.

### Findings, including emerging findings
Following an extensive audit of teaching resources in use in years seven and eight science and history, and recruitment of schools and teachers in the first year of the project, detailed video data collection of classroom interaction in the conduct of two-week units of work in year seven science and history in three schools and all student work produced in those work units has now almost been completed. Analysis of this data has just begun. Data collection and analysis of year eight history and science units of work will be undertaken in 2015. The work to date has involved the development of innovative classroom video data collection techniques and new approaches to data coding are now being pursued. A number of problematic issues relevant to pedagogies for knowledge-building have become apparent in preliminary data inspections. These include the manner in which literacy practices are developed within the subject area teaching and the practices by which the teaching of history and geography are integrated into a single subject area in some secondary school contexts.