



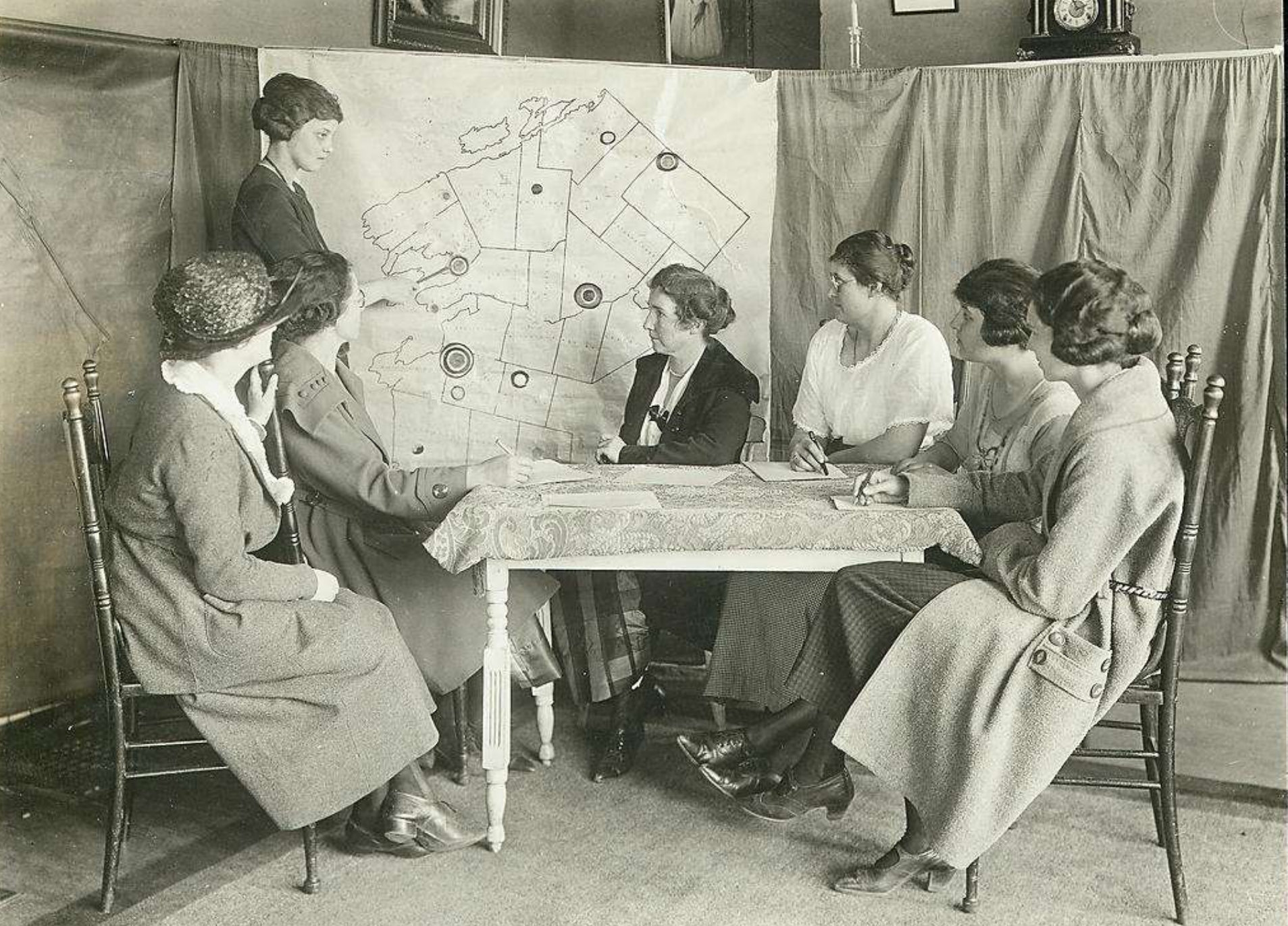
A GRAND CHALLENGE

REFLECTING ON UNIVERSITY SCIENCE CURRICULUM DESIGN, COLLABORATIVE PARTNERSHIPS AND INTEGRATION
OF INFORMATION LITERACY SKILLS



KELLY JOHNSON
DR. JENNIFER FIRN







Queensland University
of Technology





ST01: BACHELOR OF SCIENCE

MAJORS :

BIOLOGY

CHEMISTRY

EARTH SCIENCE

ENVIRONMENTAL SCIENCE

PHYSICS

FIRST SEMESTER UNITS:

SEB 101 – SCIENCE IN CONTEXT

SEB 102 – UNDERSTANDING SCIENCE

SEB 113 – QUANTITATIVE METHODS
IN SCIENCE

SEB 114 – EXPERIMENTAL SCIENCE



Breakthrough with stem cells could 'end need for transplants'

Living mice able to produce the cells capable of helping to repair a damaged heart

STEVE CONNOR ✱ | SCIENCE CORRESPONDENT | WEDNESDAY 11 SEPTEMBER 2013

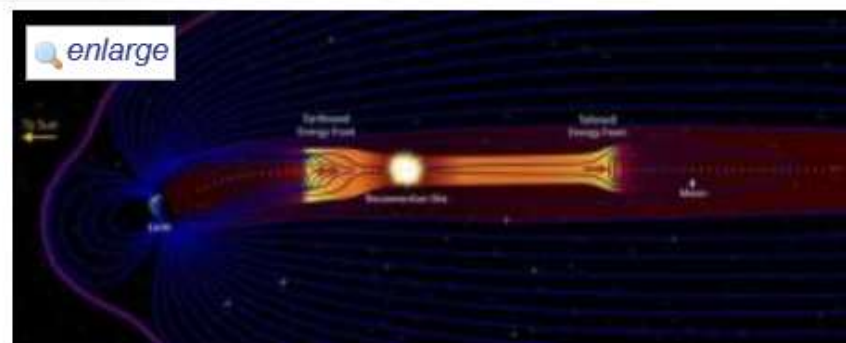
Accelerator on a Chip: Tech Could Enable Generations of Smaller, Less Expensive Devices for Science, Medicine

In an advance that could dramatically shrink particle accelerators for science and medicine, researchers used a laser to accelerate electrons at a rate 10 times higher than conventional ... [full story](#)

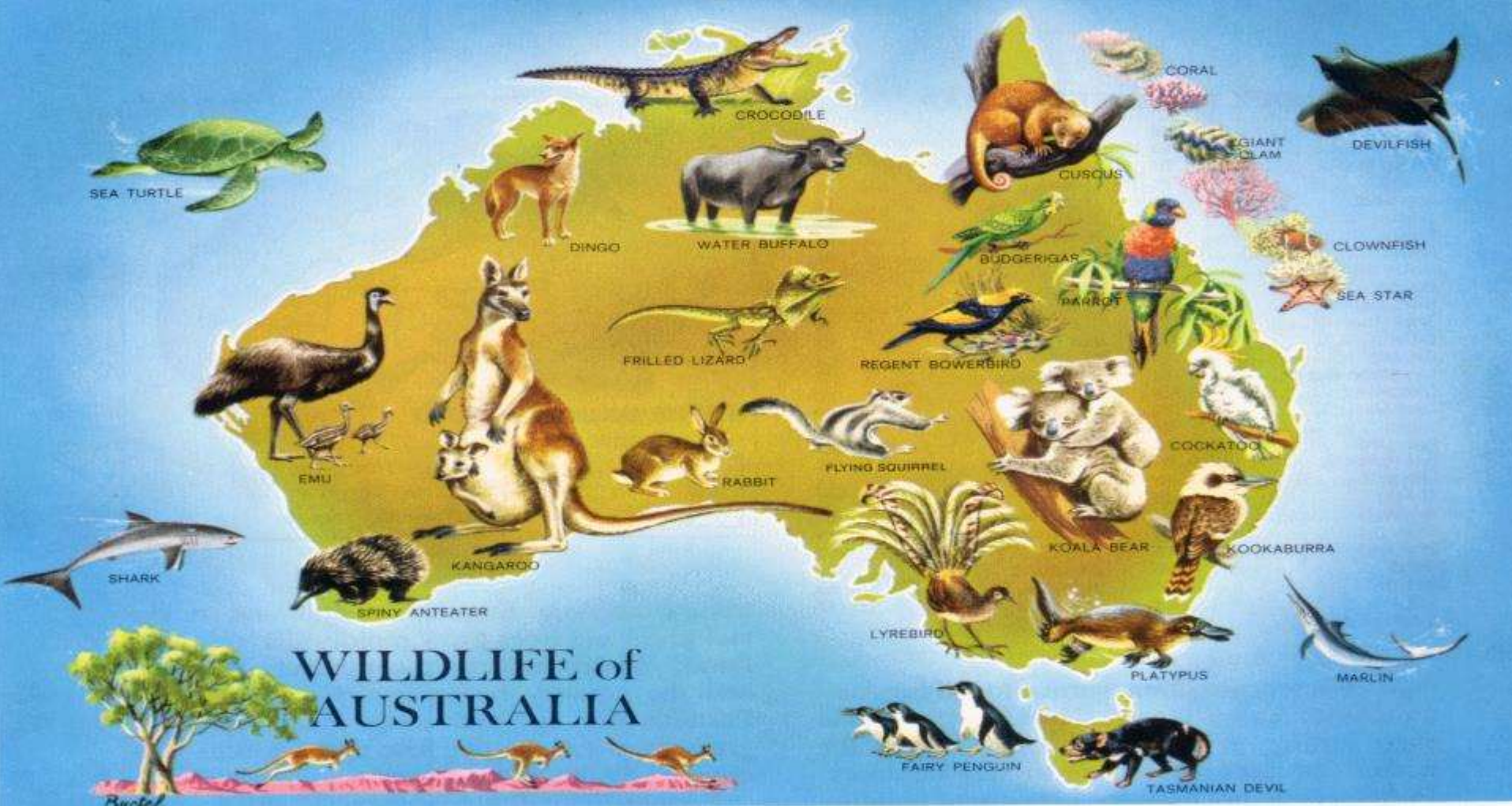


Lunar Orbiters Discover Source of Space Weather Near Earth

Sep. 26, 2013 — Solar storms -- powerful eruptions of solar material and magnetic fields into interplanetary space -- can cause what is known as "space weather" near Earth, resulting in hazards that range from interference with communications systems and GPS errors to extensive power blackouts and the complete failure of critical satellites.



An artist's depiction of magnetic reconnection, when the magnetic fields of solar storms meet the



AQF = AUSTRALIAN QUALIFICATIONS FRAMEWORK

TEQSA = TERTIARY EDUCATION QUALITY STANDARDS AGENCY

STUDENT ENGAGEMENT WITH SCIENCE

EMBEDDED INFORMATION LITERACY SKILLS



ENGAGED WITH AUTHENTIC PROBLEMS

- GRAND CHALLENGES – ENERGY, FUKUSHIMA, FOOD SECURITY AND NUTRITION, GREAT BARRIER REEF

GROUP WORK

- COHORT DEVELOPMENT,
FIRST YEAR RETENTION

THE LIBRARY'S ROLE



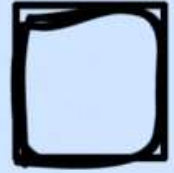




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KERRY. PHOTO. SYDNEY.

TO DO LIST



A STRONG LEADER



CLARIFY ROLES AND RESPONSIBILITIES



TARGET THE MESSAGE: CURB YOUR LIBRARIAN - NESS



Ideas to Change the World

60 second challenge



Share your idea to change the world

Share your ideas on finding a solution toward some of the global challenges facing our world. Be part of tomorrow's solution today and share in great prizes and opportunities including an invitation to speak at TEDxQUT in August 2013 and \$1000 toward attending a conference of your choice* QUT students

University Entries



Soil degradation



Urban agriculture



Climatic and Edaphic conditions create food insecurity in Africa



Food versus fuel



Rainwater filtration, treatment



How genetically modified crops

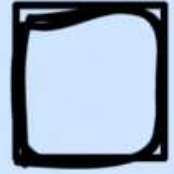


Using alternative pesticides



India's water and food security

TO DO LIST



A STRONG LEADER



CLARIFY ROLES AND RESPONSIBILITIES



TARGET THE MESSAGE: CURB YOUR LIBRARIAN - NESS



REMOVE THE JARGON



TAKE CHANCES



PHOTO ACKNOWLEDGEMENTS

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