A Grand Challenge
Reflecting on University Science Curriculum Design, Collaborative Partnerships and Integration of Information Literacy Skills

Kelly Johnson
Dr. Jennifer Firn
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

Accelerator on a Chip: Technology Advances Lead to 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.
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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<tr>
<th>Task</th>
<th>Description</th>
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<tr>
<td>✔️</td>
<td>A STRONG LEADER</td>
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<tr>
<td>✔️</td>
<td>CLARIFY ROLES AND RESPONSIBILITIES</td>
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<tr>
<td>✔️</td>
<td>TARGET THE MESSAGE: CURB YOUR LIBRARIAN-NESS</td>
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Idea 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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