



Introduction - Deakin Chemistry Education Professional Learning (DeCEPL)




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Day 1 – 27th February, 2020



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Acknowledgement of Country



We wish to begin by acknowledging the Boon Wurrung people of the Kulin nations, the Traditional Owners of the land on which we are gathered today.


We pay our respects to the local people for allowing us to have our gathering on their land and to their Elders: past, present and future.

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DeCEPL Pre-teacher survey



Pre-survey!

(This is what happens in research 😊)


Check your email – We've just sent you the link

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CEA PL Community Resources

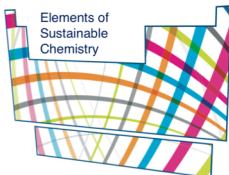


Synplicity

- Shared folder – whole group
 - Workshop presentations / resources
 - Key papers
- Shared folder – small groups
 - Shared working spaces for each teacher group

Elements of Sustainable Chemistry (ESC)

- Project updates



www.eschemistry.org

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Let's begin



Context

- What *informs* your teaching practice?
- *Relevance* of the secondary chemistry curriculum
- *New* study design (predicted changes)
- New avenues for CEA to *support* chem ed teachers in Victoria
- Improving *quality* and *reporting of best practice* in the chemistry teacher community (at conferences, in teacher magazines)

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CEA PL Communities project



Secondary school chemistry teachers will

- Co-design (in small groups) an 'class activity' that will be used in your classroom
- Use CER methodology and principles to evaluate the activity with your students
- Report and communicate your research to the broader chem ed teaching community
 - Chem/sci magazines, articles, conferences



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CEA PL Communities project



Chem ed researchers will

- Actively support each teacher group throughout
 - As co-designers of the activity and research evaluation
 - As managers of the ethical recruitment of student participants
 - As student data managers to ensure ethical standards and sound research practice
 - As 'co-authors' of subsequent reporting
- Document the journey of the teachers (research within research)
 - To evaluate the 'CEA PL communities' model

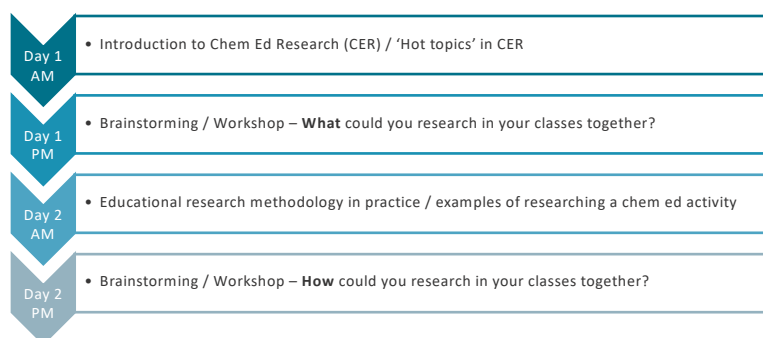


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Day 1 and Day 2 Overview



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And then...

**Before Day 3**

- Meet with your group (along with a chem ed researcher) once or twice (in your own time) to finalise your activity and evaluation
- (If time permits) Conduct the research in your schools

Day 3 (mid-May, TBC)

- Further PL on how to research and evaluate your findings



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And then...

**Before Day 4**

- (If haven't done so yet) Conduct the research in your schools
- Meet with your group (along with a chem ed researcher) once or twice (in your own time) to analyse your research findings

Day 4 (Sept/Oct – TBC)

- Present your findings to your peers
- Find your 'audience' and design your output



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And then...

**After Day 4 (timeline flexible)**

- Meet/Consult with your group (along with a chem ed researcher) to 'write up' your research
- We'll continue to support and encourage you to communicate your findings to the broader chem ed community
 - Teacher magazines (Teaching Science, Lab talk)
 - Research journals (Journal of Chem Ed, Chem Ed Research and Practice)
 - Teacher conferences (STAV, CEA, ASTA...)



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Practicalities – The activity

**Conditions to support growth**

Groups of 3-4 teachers who

- Teach the same/similar year level (in term 2, 3)
- Are relatively near to each other geographically
- Are interested to co-design an activity together!
 - Share a similar goal/vision



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Practicalities – The classroom research



Conditions to evaluate the activity

An activity that is

- Feasible in each school (as prac or non-prac)
- Has a defined time limit (1-2 classes)

Students undertake

- The activity itself, collected in non-identified way
- The evaluation (more on this later)



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Practicalities – Ethical research



Conditions to ensure ethical practice

Informed consent

- Consent to conduct research provided by DET/CEM
- Organisational consent already provided by principal / school director (independent schools)
- Teachers (you) have provided consent
- Parents will provide consent for students
- Students provide assent before first pre-activity



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Practicalities – Ethical research (2)



Non-identifiable student responses

- Recruitment of parents/students *online*, managed by Deakin
- Individual teachers will *not* know if student has (or has not) provided consent
- Students complete activities/evaluation, submit online using non-identifiable code
- Teachers evaluate together *combined* responses from other schools completing *same* activity
- Evaluation undertaken *after* students receive grades for topic/unit, not impelled to participate



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Questions so far?



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Time to start thinking about teacher groups



Who are you, what school are you from?

What subjects are you teaching this year (particularly in term 2 and 3, what topics)?

What are your main interests around chemistry education?

What is your goal for being in this project?

Groupmap – [the link is in your email](#)