

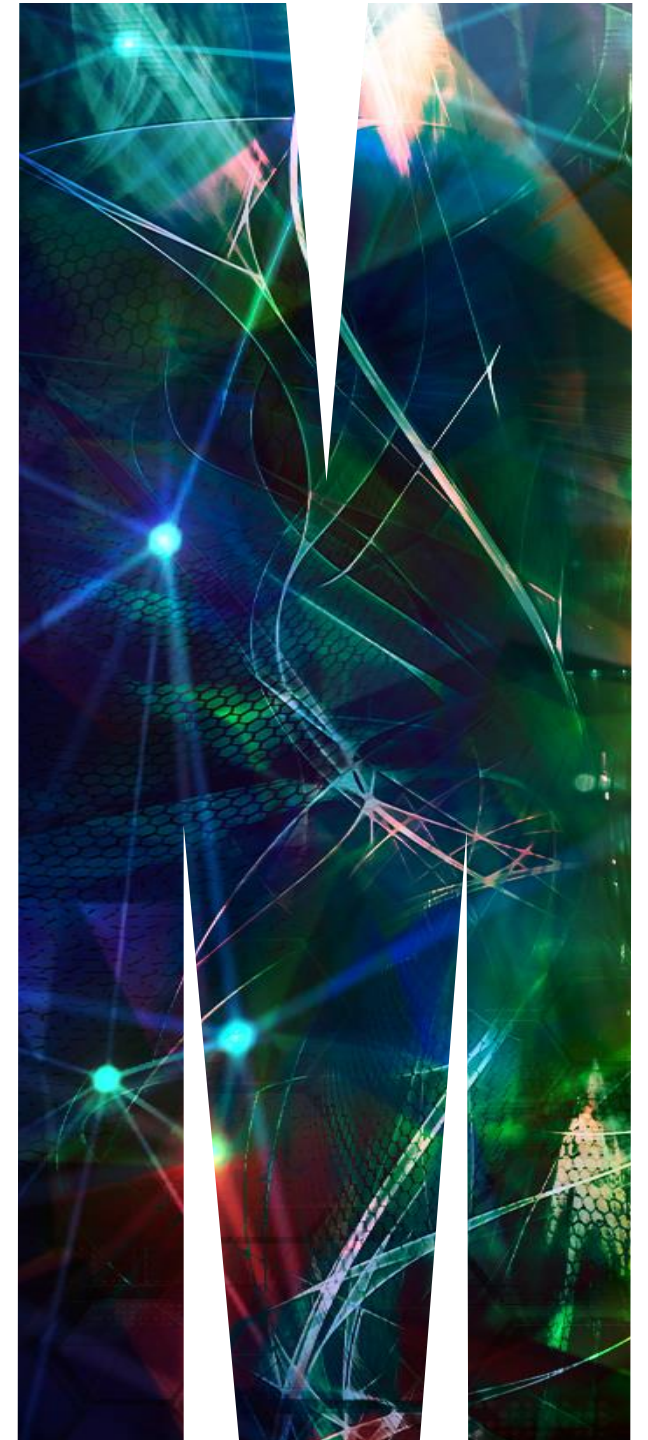
Whack-a-mole: An innovative approach to evidence-based teaching and assessment of complementary medicines

Changing culture through health professional education and training

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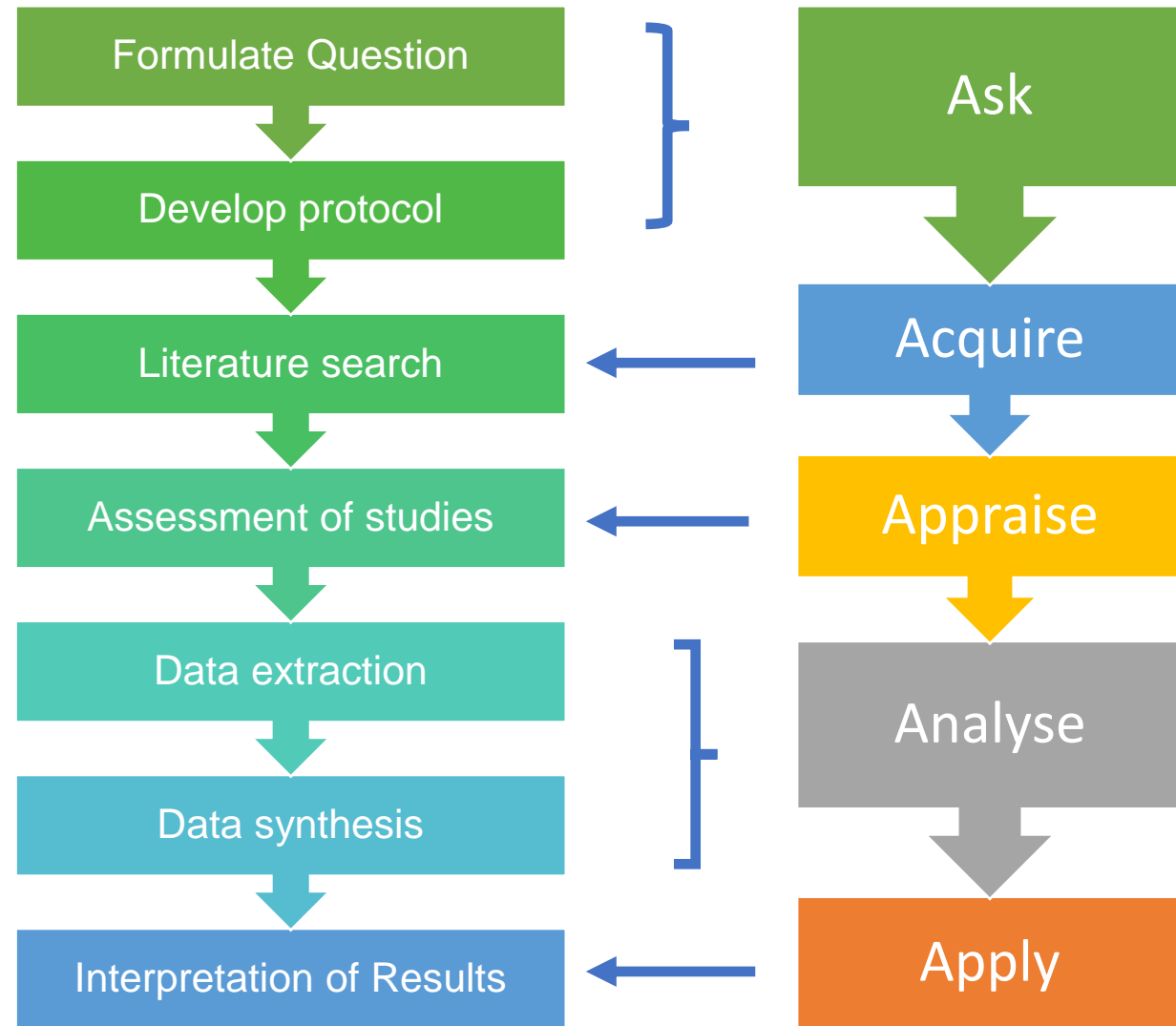
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Teaching core skills in health professional graduates

At the end of this medical graduate entry unit we wanted students to:

- have an understanding of the **Australian healthcare system** and **Australian regulators**;
- demonstrate and apply of the principles of **evidence-based medicine**;
- **develop** a research question;
- **systematically search** the medical literature;
- **critically appraise** and review the evidence or lack thereof, and
- identify **breaches of regulation**.



The Whack-a-mole project

Complementary and alternative medicines (CAMs) provide the current context for this authentic assessment as they are widely used in the Australian population making them an important subject for health professionals and policy makers. The project aims to:

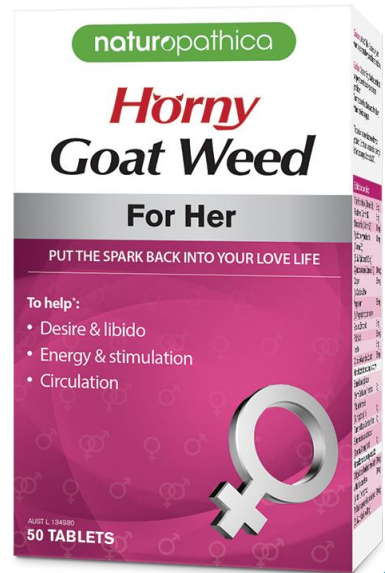
- develop core skills that are necessary in health professional graduates such as: research literacy, communicating health information, critical thinking, team work and applying the principles of evidence-based medicine (EBM);
- give students practical experience in health advocacy by being involved in citizen science;
- provide an authentic and enterprising assessment as it has real-world applications and engages industry partners, government bodies and other organisations.



[Watch a video about the project](#)

Whack-a-mole assessment strategy

Student teams are assessed on the steps below:



Step 1:

Document your product: why chosen and what claims are made about it.

Step 2:

Collect the evidence: document your search strategy and the key references found.



Step 3:

Summarise the evidence: [PRISMA flow chart](#) and explain why you thought specific regulations were breached.

Step 4:

Write a report for assessment including [a PICOT research question](#) about your product.

Step 5:

Make a movie of your work (new 2018).

Results and impact

A total 464 students (119 reports) completed the 2018 WAM assessment with an average mark of 52/60 (86%). Of these 115 students (25%) completed the online questionnaire.

What was the result of your whack-a-mole project?	n (%)
There is some evidence but not sufficient for claims (mole half whacked)	63 (55)
Product did not have evidence to support claims (mole whacked)	49 (43)
There is some evidence for some of the claims (mole half whacked)	3 (3)
There was evidence to support the claims (mole not whacked)	0 (0)

98% found that their product lacked evidence to support the claims made

Ninety two percent of students said the WAM project changed their perceptions of complementary medicines and its regulation by the TGA.

A de-identified selection of student reports was submitted to the regulators as formal complaints. All were upheld.

Conclusion

- Authentic assessments can play a key role in developing complex problem-solving skills in an evidence base medicine context.
- The Whack-a-mole project provided a current context to apply the use of the skills that are directly relevant to students.
- Changes in perception were linked to the dearth of evidence found when investigating specific CAMs and an increased awareness of regulation.

