Australian Government | Office for Learning & Teaching

THE UNIVERSITY OF SYDNEY

WESTERN SYDNEY UNIVERSITY

Professor Pauline Ross

National Teaching Fellow, OLT
pauline.ross@sydney.edu.au

cshe

THE UNIVERSITY OF SYDNEY

Clear

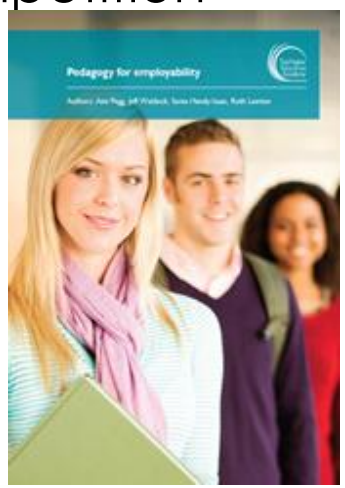
Increased number of teaching focussed appointments Probert 2013, Chalmers 2015

HE context is Changing

1. Scale
2. Regulation and Deregulation
3. Diversity
4. Labour market – accreditation
5. Technological – “anytime”, “anywhere”
6. Expectations – student and community

disruption

Graduate Employability
Core Interest
Increased costs and competition



Emerging technologies
Search for new models of university education to replace OLD outdated inflexible, ineffective

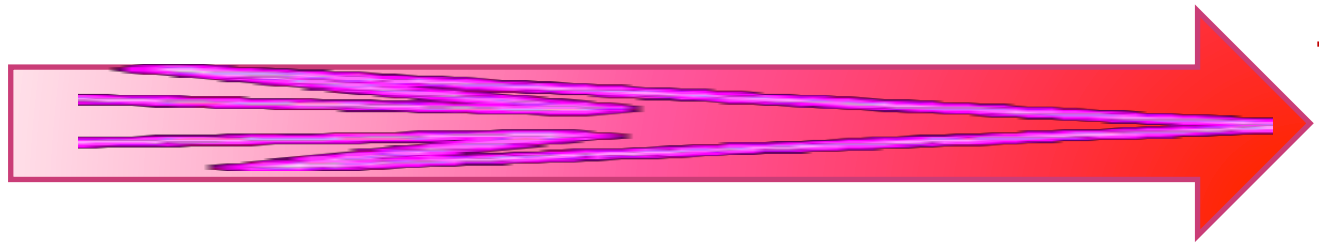
Deregulation
Fund research separately to education?

Teaching Focussed Positions
Result of actions of the NTEU rather than universities
What future for academic in these roles?

National Tertiary Education Union

Emerging Quadchotomy

Research focussed



Teaching/Education focussed

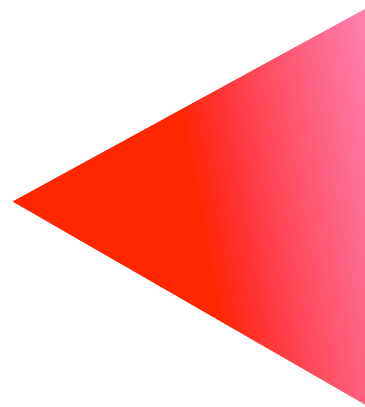
Academic roles

At least - trichotomy

1. Teaching and research academic
2. Research focussed academic
3. Education focussed academic

1. Original model
2. New model
3. Newest model

Quadchotomy - Sessional staff teaching focussed



Education focussed because

- Increasing number of students
- Increasing diversity of students literacy and numeracy skills

Academic roles

Some LFs are places for poor performance (ERA)

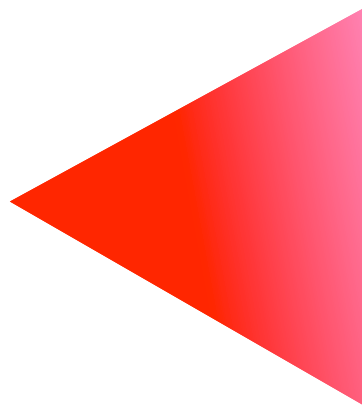
Others because declining funding &/or committed to education

How do we evaluate teaching?

Can we reach a consensus on how to do this in the Science & Maths disciplines?

Know how to evaluate research

Not sure when it comes to teaching, especially large first year co-ordination



Measure of research quality

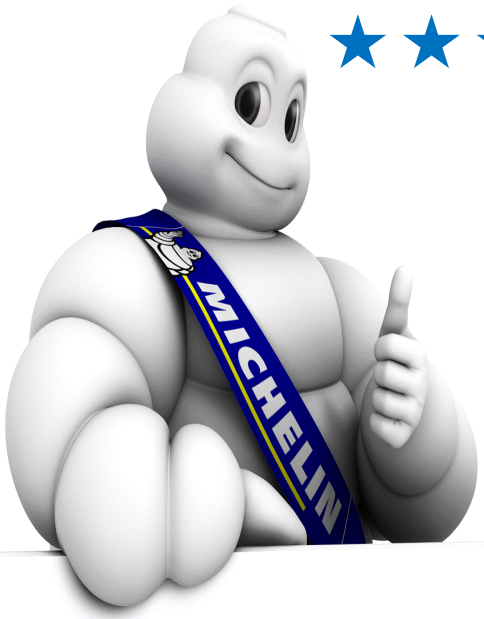
Evidence of research activity may include:

- publications (includes chapters in books, refereed journals
- published conference papers;
- research reports which demonstrate original observations;
- patents.
- creative works (exhibitions, performances, designs).

Demonstrated ability/potential to initiate and to resource a re
or evidence of having had a significant role in collaborative r
projects.

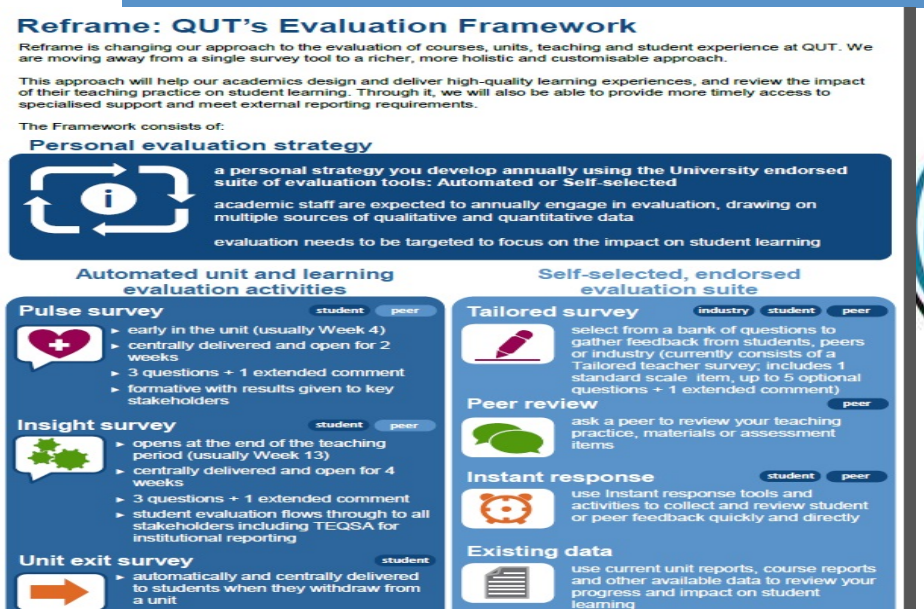
Evidence of research standing is desirable, as demonstrated by:

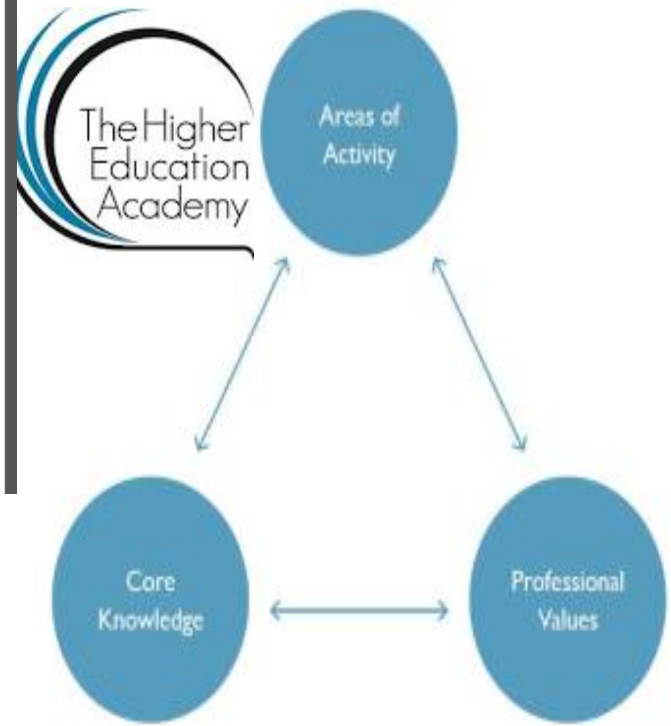
- refereeing articles in scholarly journals;
- examining higher degree theses;
- Citations and H factor

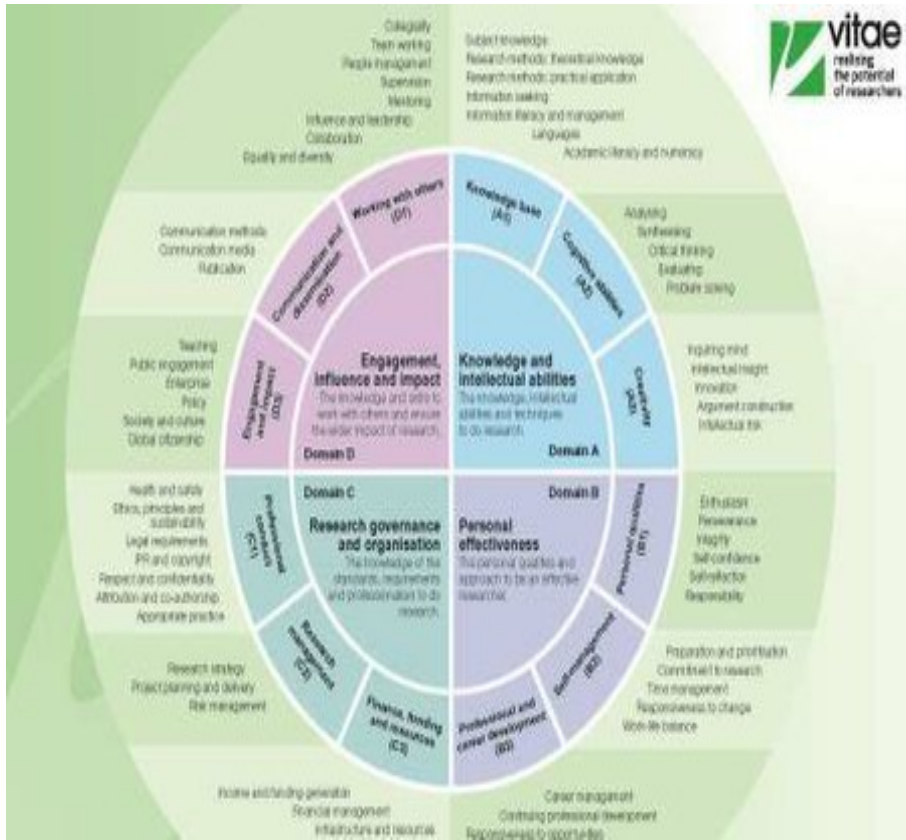


Overwhelming number of metrics

Overlapping criteria of teaching quality







AUSTRALIAN

University Teaching Criteria & Standards Framework

Publications

The project was designed to respond to significant changes in the higher education sector. The growth in demand for higher education, the increase in global competition, the broadening of student demographics and the availability of technology have heralded a need for diversified pedagogical approaches to ensure

How do we evaluate teaching?

What criteria should we use to assess teaching quality?

How do we evidence these?

For example:
Criteria - Student learning
Evidence - Student feedback on units/subjects

Workshop Activity Groups

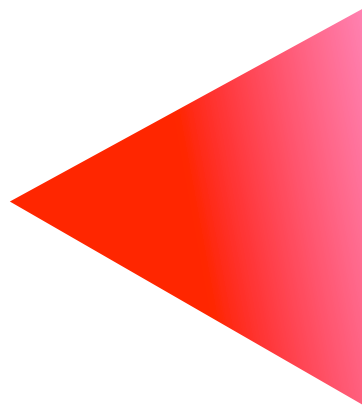
1. What criteria?
2. What evidence?

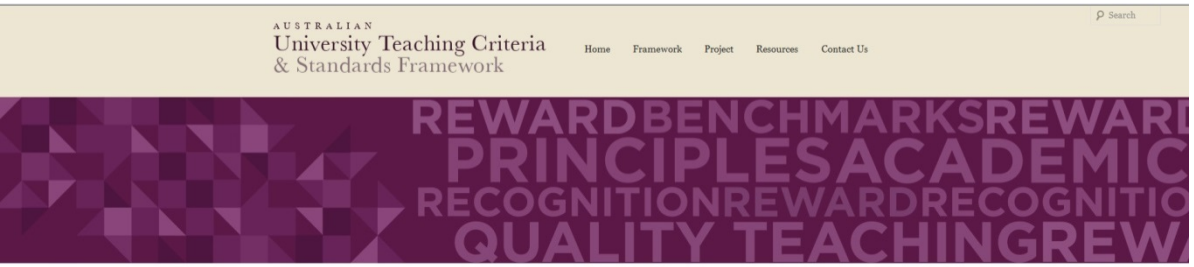
Resolving problems

- Individual vs group delivery, First year – Unit co-ordination
- Entire academic role

Brainstorm for 10 minutes to arrive at criteria

Criteria to evaluate teaching?





AUSTRALIAN
University Teaching Criteria
& Standards Framework

- The seven indicative criteria are:
- 1. Design and planning of learning activities
- 2. Teaching and supporting student learning
- 3. Assessment and giving feedback to students on their learning
- 4. Developing effective learning environments, student support and guidance
- 5. Integration of scholarship, research and professional activities with teaching and in support of student learning
- 6. Evaluation of practice and continuing professional development
- 7. Professional and personal effectiveness

Evidence

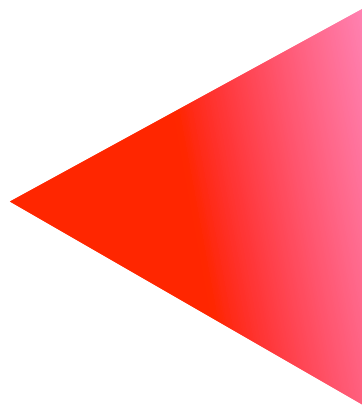
Making evidence count

The Promoting Teaching Matrix: perspectives & principles in practice

A model for universities to enhance understanding of evidence that counts for promotion at various phases of academic career

Scope of teaching activity	Source of evidence: Personal	Source of evidence: Students	Source of evidence: Peers	Example of evidence	Phase/s of career	External sphere of influence
Professional Learning						
University teaching preparation/induction	●			Certificate of completion	Early	
Completion of formal qualification in teaching	●			University transcript	Early to mid	
Attendances at internal or external teaching-related workshops	●			Institutional records	All	
Training and experience from the relevant industry/profession	●			Formal records of professional experience and training	All (if relevant)	
Engagement with Professional Standards Framework	●			Peer reviewed teaching portfolio	All	🌐
Student Engagement						
Statement of teaching philosophy/teaching principles	●			Statement presented	All	
Teacher / subject / course evaluations		●		Formal survey reports	All	
Student learning outcomes		●		Retention and pass rates; student prizes and projects	All	
Peer observations of teaching			●		Formal evaluation report	
No of undergraduate and taught postgraduate projects /research degree continuations and/or completions		●	●	Institutional records; HDR students supervised (successful completions)	Mid onwards	
Institutional or national teaching awards	●	●	●	Awards that validate nominated areas of expertise	Mid onwards	🌐
Curriculum Development						
Undergraduate research engagement	●	●		Documented strategies; student evaluation	All	
Reviews of resources developed (including online, media-rich and open resources)	●	●	●	Independent reviews	All (more likely earlier)	🌐
Prizes and citations related to resource development		●	●	Award certificate	Mid to later	🌐
Subject/course development, curriculum review	●	●	●	Independent reviews	All (more likely mid to later)	🌐
Peer evaluations of curriculum			●	Formal review reports	More likely mid to later	🌐
Successful introduction and development of major innovations	●	●	●	Demonstration; peer review, student evaluations	Any stage but more likely from mid	🌐

What do academics in Science/Maths identify as evidence of quality teaching?

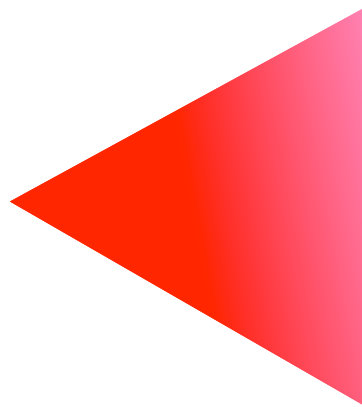


Perspectives of Science/Maths academics

- Variety of institutions
  - Research intensive institutions included: Sydney, UNSW, ANU
  - Research/Teaching institutions included: UTS, Western Sydney
- Variety of academic levels and roles, VCs, DVCs , E, D & C
- Mainly Science
- ~20 interviews

Evidence

What type and from who?



Evidence - type

1. Student learning
2. Student opinion
3. Leadership
4. Curriculum innovation

Evidence type – 1. Student learning

"If I had my dream, I would ….. do a pre and post evaluation of our students' learning in some way, so that we could definitely demonstrate that there had been a change in the students". Go8 Level D

"I mean the purpose of being here is to have an impact on student learning".

Evidence type – But be careful what you wish for

"We don't generally measure where the students are at the beginning and then where they are at the end.

In fact were very poor at that.
In fact it might even be shocking if we did it.

We might find at the end they do less well than at the beginning. In fact we might find something that we don't really want to know". Go8 Level E

Evidence type – 2. Student opinion

“ I can tell a good teacher by listening to what their students say about them. You run into students and you say oh what are you doing this semester? They say who have you got and they say and I say what do you think of them? How do you think that’s going? The students will tell you very very quickly whether sometimes a good teacher or not”. Go8 Level E

Evidence type – 3. Leadership

"Strong commitment to teaching which means they would have published. But they would have published high quality work in relation to their discipline, the pedagogy of their discipline". Go8 Level D

"Got to have leadership, that means you will be leading programs.. Taken a pedagogy that works, and then 10 or 20 of your colleagues are using it. I want to use your pedagogy". Go8 Level D

Evidence type – 4. Curriculum innovation

"Demonstrate strongly their leadership of teams developing new curriculum or modifying curriculum".

"Involved in running education innovation programs across the disciplines and across the faculty".

Evidence – from?

"Quite difficult to collect in a sensible fashion".

"Some evidence but recognising the difficulty with collecting evidence".

1. ~~Self~~
2. Students
3. Peers (internal and external)

Evidence from 1. Students

"Some improvement in the student evaluation scores feedback from students specifically about whatever the innovation had been and some data showing that learning had improved".

Evidence from 2. Peers

“Peer evaluation of teaching” The reason I want this is we do peer evaluation of research… I would like us to do a similar thing, where we do this so that people can appreciate the challenges that come with teaching”.

“Peer review, if there are peer review opportunities people are coming to your classroom”.

Evidence – for what purpose? to convince who?

Promotion committees

"A promotion committee is malleable in the sense of not having to adhere to exactly what's there, so long as you've got good strong evidence". It's a bit like criterion standards with students. I mean sometimes they don't actually match what you see in a quality piece of work".

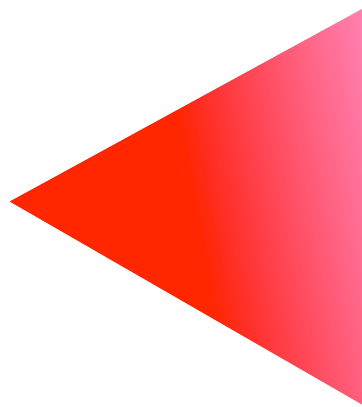
But care is required

"Even though we now have these education indicators for promotion they are not widely used".

"I think they use the metrics that they know and that's what happened to me, because I wasn't promoted so they used the metrics that they knew and it did not apply to me…… they said they couldn't understand what my intellectual contribution was. I had leadership, I had all the other things coming out, but they couldn't say I had discovered this blah in my individual original contribution".

Go8 Level D

Many academics expressed suspicion around evidence of measures of leadership



Suspicion

Did not know what how to evidence leadership

Suspicion

Suspicious scholarship

"We all look at student evaluations with a somewhat sceptical eye".

"There's a lot of dross in the education literature".

"They are looked at somewhat suspiciously these people who are doing education-focussed activities".

"That scholarship isn't really very rigorous is it? It's not highly valued. It doesn't have a very high impact factor for those journals".

"I've also heard that from people who are in that space doing their education research. It's one of their complaints about it, that it is regarded as a softer scholarship than the normal science that we're used to".

Suspicious appointments

"A high profile researcher and his team will be 'parachuted' into the School (ie they are being poached from elsewhere),

these sorts of parachuting appointments prevent filling desperate holes in teaching but will increase total research performance….. they are typically for research only appointments, and are never done for high profile teachers". ATN Level E

"What is more insidious is those people that there is no advert for. They actually appear because they have been head-hunted and its all done very secretively.. Done behind closed doors. There is no general knowledge to why the person is employed what the criteria were. Noone comes through the door by stealth is a high quality teaching and learning expert in science. That never happens ever happens".
ATN Level E

Many academics expressed the danger of an academic role in education in maths and Science

Mobility

“There’s a mobility issue within institutions between academic roles”.

“We wouldn’t hire someone from a second tier institution”.

“No matter how good – well you’re performing at other institutions.”

“There are non-articulated biases , they are not clearly written down, but they inform practice”.

“The people who are in the level A and B, who are carrying the burden of our teaching, are the ones who we are actively discouraging from doing discipline based research, and they won’t be competitive in that area…. that people who are doing a lot of teaching, still need to keep connections with discipline based research to have a career”.

And future

“Unless the person has got such a reputation that goes beyond the walls of the institution - which is rare in teaching - that person is going to go nowhere. What'll happen is in 10 years' time you have a new vice-chancellor or some other rules about promotion and value of an individual - they will look at - they say, oh, that person hasn't published for the last 15 years. Oh well, now they'll get a redundancy packet”.

Go8 Level E

Future - solutions

Some say we need

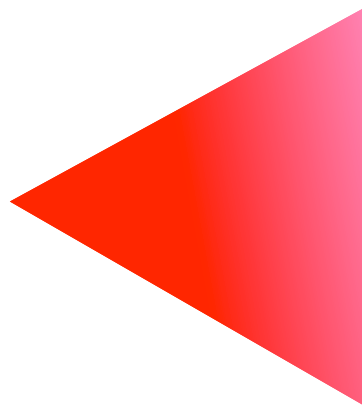
- Sort out the inequalities
- Focus on student learning
- More robust scholarship
- Accreditation of professional standards

Translation – arise from the disciplines and be communicated
Peer external review?

At some point all academics agreed

Value

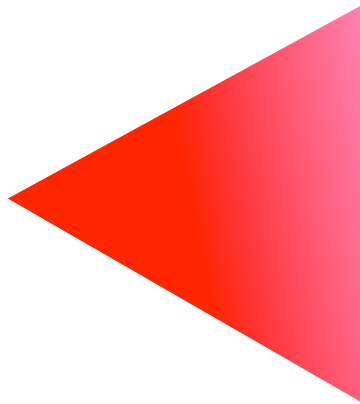
Conception



Value

"We should not be recruiting education focussed roles. We should have academics appointed who are TnR academics depending on where they want to focus". Go8 Level D

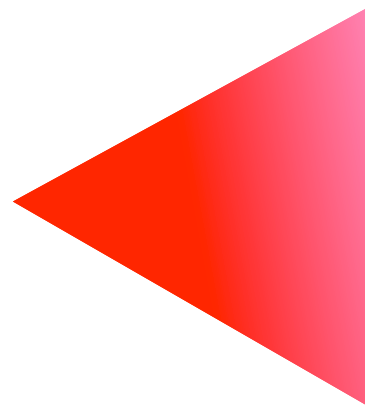
"We shouldn't have teaching focussed or research focussed positions. I think a career starts off in one place and ends up in another place, and in between those two extremes, there's sort of an up and a down and a backwards and forwards depending on circumstance, interest and opportunity". ATN Level E



Value – need broader conception

"Everybody in this place who is here because they love what they do has value and we ought to be building a system which instils in people the value of what they innately bring.
The right questions (in promotions) is what value do you bring to this place? Instead we ask how good are you? They're different questions, because when we ask how good you are we make it a unidimensional question.
At there's a bit in brackets that's not said, but which is implied: how good are you at research?
That's the question we ask promotion". Go8 Level E

Danger of being



Delusional

"That's the game in front of you. What an awful game, right. You might bring untold value to your department, your local area. You might be the rock on which your department's built. It doesn't matter. It doesn't matter. We don't know you. Tell us – and have these six people who know nothing about you tell us about you right. That's the game. It's a handicap race". Go8 Level E

Disciplines view of change

"The people who say it's changed think it's changed. But they don't know is hasn't changed. They're delusional. They're delusional. It's sad because these aren't dumb people. These are smart people, but they're believing their own press and this is not a good thing". Go8 Level E

Merit is malleable

"Merit is not some set in stone, externally fixed, objective characteristics, right.

Merit is whatever we decide it is for a particular decision point.
If merit contributes to be defined by research excellence or more heavily weighted in favour of research excellence, then .....people who have a more heavily weighted teaching background or teaching expertise, no matter how good it is the value of their experience will be weighted less heavily than the value of research experience if merit for academic promotions continues to be mostly defined by capability in that realm."

Reasons - operational

- Regulation
- Students - diversity and needs
- Research funding
- Academic – expertise and interest
- Economic – knowledge based society

Even accounting firms are emphasising

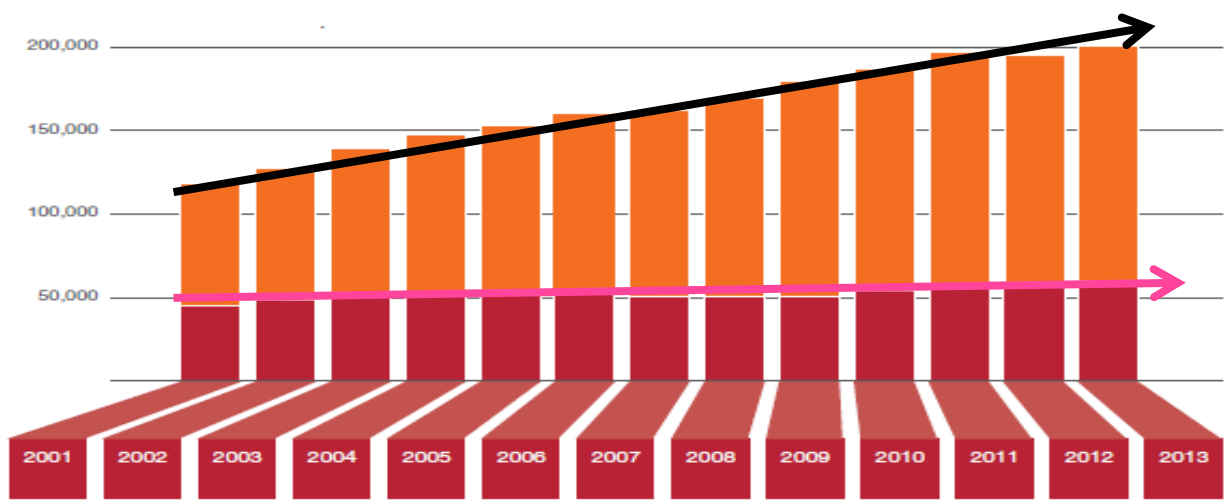
A smart move

Future-proofing Australia's workforce by growing skills in science, technology, engineering and maths (STEM)

May 2015

Global need to re-imagine STEM education

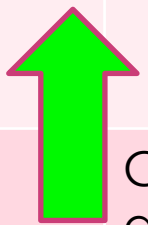
No. students completing degrees



Non -STEM degrees

STEM degrees

2001 Time 2013

Differing characteristics and

	Research
Expertise	Creators of new knowledge in science disciplinary research
Connections	Deep and connected with a community (scholars and students)
Progress	Rapid
Reputation	Dependent on quality constantly adapting
Funding	Category 1 – although declining. ARC
Mobility	Likely- flexible