How has the implementation of CRA in the School of Zoology been managed by staff and received by students – a preliminary report

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Background about CRA

Students are more engaged with their learning and perform better if they know what is expected of them (Huba and Freed 2000).

CRA has come, in the last 20 years, to be regarded as best practice as an assessment strategy which:

- gives students an explicit understanding of what teachers expect from them (Sadler 2009)

- allows staff to quantify the extent to which students have achieved the goals of a task, unit, or course (Guidelines for Good Assessment Practice, 2007)
Types of CRA

Standards Based CRA
(the strategy with which we at UTAS have been becoming more familiar recently!)

2 main formats

**Holistic (global) grading**
- teacher “gradually builds up a complex mental response to” the work
- makes a judgement as to the overall quality
- perhaps also providing reasons for the judgement, and feedback on the work

The holistic judgement dominates and any references to criteria follow, sometimes almost as an afterthought

- the teacher looks for a way to justify the mark they have given and know in their hearts to be the right one (Sadler 2000)
Types of CRA

**Analytic grading**
The form to which many university teachers are moving, may sound familiar

- teacher makes separate judgements on preset criteria
- these often made available to the students in advance of assessment task
- often combined with criteria being weighted relative to their perceived importance by the teacher
- also often combined with the use of a rubric, in which (often) written quantifiers describe levels or standards of achievement for each criterion
Aims of UTAS CRA project

In 2007, the UTAS Assessment Working Group wrote a report advocating assessment reform at UTAS, based around the adoption of SB CRA across the university.

The use of SB CRA was mandated by the University of Tasmania Senate in 2009, to be implemented across all undergraduate teaching units by Semester 1, 2011, with four perceived outcomes for students:

- Clearer understanding of what is expected of students
- Increased control over students’ own learning
- Increased satisfaction by students about assessment practices
- Increased consistency within and across faculties (Centre for the Advancement of Teaching and Learning (CALT), 2010)

For staff, expected benefits include opportunities to:

- Improve assessment practices and evaluate units
- Share good teaching practice with colleagues
- Streamline the feedback process (Centre for the Advancement of Teaching and Learning (CALT), 2010)
Aims and methods

**Distributed leadership model**
- “champion” identified in each School
  - local expert driver of the implementation of the SB CRA
- gentle reminders, formal requests, begging (!), assistance in generating criteria or standards, evaluation of compliance
- Zoology champion = AE
- today:
  - how the students have received CRA
    - particularly from the point of view of clarity and transparency for the students
  - what the staff think about CRA
    - and workload, and ability to give feedback for the staff perspective
Data collection

1. Unit SETL (Student Evaluation of Teaching and Learning) scores comparing before and after CRA
2. Open question responses on SETLs
3. Surveyed Zoology staff (unit co-ordinators, mostly) using paper surveys at the completion of their units in 2010
4. Interviewed several Zoology staff face to face to gain little more detailed information
5. Interviewed 10 staff from the Biology Dept at Otago University in New Zealand
   ▪ as a comparator department
   ▪ no consistent strategy on assessment between units
   ▪ almost completely does not use SB CRA

Show you these data + interpret

Hear from you about how your own experiences compare with ours, and for you to share any ideas or suggestions you might have about what comes next!
Zoology’s timeline – initial inertia

Zoology staff, quite rightly, pointed out that we were:

- already in many cases giving substantial information about assessment pieces to students
- already doing a lot of what seemed to be required

In fact:

“individuals and groups of tertiary teachers, when faced with challenges to long-held values and assumptions, are not usually quick to act” (Morgan et al 2004)
Most units already incorporated

- Detailed task descriptions in the unit outline
  - accessed both online through MyLO
  - accessed in the practical manual for each unit

- Verbal instruction in class in advance of **and** during each task

- In some cases tutorials devoted to assessment piece discussion

Were we right to think we “had it covered”?
SETL q: “The criteria for each assessment component were clearly identified”

2009 (before) – range 3.7-4.0

2010 staff asked to generate, provide and use criteria + standards rubric for major assessment piece

2010 (after) – range 3.7-4.1
Two possible interpretations?

1. Zoology it hopelessly wrong
   - have a lot of work to do next year
   - modifying /improving our assessment rubrics
   so we didn’t see a big improvement in our scores

OR

2. Zoology were already doing a pretty good job of being clear to our students about assessment expectations

Any evidence for the 2nd option?
"The criteria for each assessment component were clearly identified."

Zoology scores compare favourably with Faculty of SET means for 2007/08 vs 2010:
- Sem 2 2010 data not yet available
- Scores range from 3.9 – 4.1 (cf 3.7-4.1 Zoology 2010)
A concern expressed by Zoology staff

How would we actually use the rubrics we were to create?

How this would compromise good giving feedback to students?

In addition to substantial information given in multiple formats before and during assessment tasks, most Zoology assessment pieces were returned accompanied by substantial feedback to students, in the form of:

- Comments written on individual assignments
- Feedback sheets with simple version of criteria and standards
- Verbal feedback in class
- The opportunity for one on one feedback
SETL q: I was given useful feedback on my assessment work

2009 (before) – range 3.77 - 4.1

2010 staff asked to generate, provide and use criteria + standards rubric for major assessment piece

2010 (after) – range 3.5 – 3.83

Surprising and disappointing
SET Faculty mean of means

“I was given useful feedback on my assessment work”

Scores range from 2.8 – 3.8 (cf 3.5 – 3.83 Zoology 2010)

Zoology scores compare favourably with Faculty of SET means
Interpretation?

CRA rollout has across the university placed the issue on student’s collective radars - are they more aware of what they aren’t getting in some places?

Could 1\textsuperscript{st} + 2\textsuperscript{nd} yr score drops in Zoology simply be a reflection of the students maturing as learners and coming by 3\textsuperscript{rd} yr to recognise that feedback can come in many different forms?

**Suggestion**

Increased “overtness” about the provision of feedback particularly at 1\textsuperscript{st} and 2\textsuperscript{nd} yr level as a way of managing student expectations might overcome the perception that they are not receiving feedback.

Perhaps the feedback might be coming in a format they weren’t necessarily recognising as being feedback.
2010 SETL open comments

SETL open comments for 6 Zoology units for 2010, all from sem 1

- 1 x 1\textsuperscript{st} yr
- 2 x 2\textsuperscript{nd} yr
- 4 x 3\textsuperscript{rd} yr

Examined all comments for responses relating to clarity of assessment criteria specifically (least ambiguous)

Feedback related comments easily confounded by just focussing on the major internal assessment piece in most units

274 evaluations actually had comments written on them, 43 comments related to assessment in some way

Only 4 (1.5\%) expressed a lack of clarity with criteria or expectations of an assessment piece

(Cf 2009 data 5 comments across only 3 units)

😊
## UTAS Zoology surveys and interviews

<table>
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<tr>
<th>Positive</th>
<th>Negative</th>
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<tbody>
<tr>
<td>Providing feedback was made easier for some (Carlson et al 2000)</td>
<td>A lot of work to set up initially (current data – more than half feel they will have to rework rubrics for next year)</td>
</tr>
<tr>
<td>Marking time was sometimes reduced</td>
<td>Criteria may not be transferable between years</td>
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<tr>
<td>Marking consistency was sometimes improved (Sadler 2000)</td>
<td>Marks may not as well spread as in previous years (corroborated by NZ 1st yr teacher comment)</td>
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<tr>
<td>Transparency of expectations improved</td>
<td>Rubrics not as helpful to students when there is not a single correct answer (Sadler 2000)</td>
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NZ interviews – a contrast!

Results – Univ. of Otago (NZ) - assessment and feedback

- Different teaching arrangements in this NZ Biol Dept – larger dept, double the number of academic staff, very research focussed

- No system in NZ for teaching performance based funding from Govt

- At 1st and 2nd yr level academic staff lecture, teaching-only fellows deliver pracs, tutes, cover all internal assessment, exam marking

- At 3rd yr level, this pattern changes and lecturing academics have involvement in prac teaching and marking, give feedback

- Class sizes can be large, sometimes more than 1000 students

- The dept undertakes a large amount of PG course work teaching as part of MSc programs
<table>
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<tr>
<th>1&lt;sup&gt;st&lt;/sup&gt; + 2&lt;sup&gt;nd&lt;/sup&gt; yr teachers</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt; yr + PG coursework teachers</th>
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<tr>
<td>Teaching fellows used feedback sheets and written comments on returned work to provide feedback</td>
<td>Teachers firmly against use of assessment rubrics</td>
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<td>Did not use assessment rubrics with descriptions of standards of achievement <em>per se</em>.</td>
<td>Viewed as “spoon feeding” and “babying”</td>
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<td>CRA was not on their radar, general opinion was change is bad, the perception being that it would be too much work, and not worth the effort as students weren’t complaining about the current system</td>
<td>“If the students don’t know what we want from them by now, then they shouldn’t be here”</td>
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I realised I have had an easy run working with staff that are receptive to change, needing to make only small, incremental changes to current practice.
Summary

So how well has Zoology has fitted in with the aims of the CRA project as suggested initially by the working party?

From the students’ perspective

Clearer understanding of what is expected of students

Increased control over students’ own learning

Increased satisfaction by students about assessment practices

Increased consistency within and across faculties (Centre for the Advancement of Teaching and Learning (CALT), 2010)
Summary

From the staff perspective

Still more information to collect, particularly once we receive our SETL comments for semester 2 2010

Improve assessment practices and evaluate units

Share good teaching practice with colleagues

Streamline the feedback process (Centre for the Advancement of Teaching and Learning (CALT), 2010)

- opportunity to work with 4 other Zoology teachers in developing and modifying assessment rubrics across 5 units (other staff didn’t need me)

- ATN assessment share ideas with colleagues

Thanks for your time!