Characterising student perceptions of their learning environment

Embedding UTas GGAs into 2nd yr Zoology practical class teaching

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WHY DO THEY COME AND WHY DO THEY STAY?
MEETING THE NEEDS AND EXPECTATIONS OF
UNDERGRADUATE STUDENTS IN THE LIFE SCIENCES

FINAL REPORT OF THE TEACHING DEVELOPMENT GRANT
"ENHANCEMENT OF TEACHING PRACTICES IN THE LIFE
SCIENCES: LINKING SCHOOLS AND UNIVERSITY"

ANTHONY KOUTOULIS, SUE JONES, NATALIE BROWN
& VICKIE MOORE

MAY 2004
CEQ

Student satisfaction
Generic skills 18%
Good teaching 18%
Overall satisfaction 19%

Outcomes
Full time employment 11%
Full time study 14%
Life Sciences students DEMAND value for money!

“…paying thousands of dollars a year to learn…want to feel like you’re getting something beneficial…”

(Koutoulis et al 2004)

Students regard themselves as customers paying for a service

(Layne et al., 1999)

So do students feel they are acquiring useful skills?
In an attempt to bridge the gap.....

• UTas GGAs

• Discipline-specific (scientific skills)

How far apart are:
a) student expectations, and
b) my learning tasks
   (designed to allow them to practice what I see as valuable skills)?
Can students relate classroom tasks to skills acquisition?

What connections do students make between:
   a) learning tasks + GGAs?
   b) learning tasks + specific scientific skills?

Are they satisfied with their learning experiences?
Impetus for the innovation

“I wish there had been more group work”
(student finishing 2\textsuperscript{nd} yr Zoology)

“Well sure, NOW I get why we had to do it”
(repeated sentiment of honours student + sem 2 3\textsuperscript{rd} yr student)

Accountability and documentation
(Ballantyne 2003, Annetta, 2004)

How do student perceptions of learning tasks differ from mine?
The proposal

Educate students about GGAs

Encourage students to think critically about:

- WHAT they are doing
- WHY they are being asked to do it
- HOW it contributes to skill acquisition
Choice of delivery methods

**Focus groups** - no:
- Small groups – learning exercise
- Participant familiarity
- Independent moderator

**Online surveys** – no:
- Computerphobes
- Time to set up (+cost?)
- Lower response rates
- Anti open-ended questions

So the decision was a 3-pronged attack
Week 1:
“a survey…more suitable to assess awareness, knowledge, or facts”

(Thackeray and Neiger 2004)

Use as learning task
No technophobia
Don’t want flexible completion
Low cost
I am involved in the process throughout
Exercise 2

Title: Crustaceans 1

Aims: In this exercise you will survey the diversity and structural organisation of selected examples of the Phylum Crustacea, emphasising common and divergent features with reference to taxonomy and phylogeny. Examples (preserved and live specimens) anacostracans, ostracods, cladocercans, copepods and cirripedes.

- As you work through today’s practical, think about each of the tasks you complete, and why you are being asked to complete them.
- Which of these Aims (above) and which Generic Graduate Attributes does each task address?
- What scientific skills are you practising today?
Weeks 2 - 11

Reflective small group discussions at the end of practical classes

Approx. every 2\textsuperscript{nd} week, included:

“Small group discussion questions – include answers to these questions in your practical book, after discussion in class:

What scientific skills did you practice today?

What generic graduate attributes did today’s tasks address?”
3 Implementation 2005

Week 12

Follow up survey, slight rephrasing of questions to encourage reflection

Encouraged them to make links between learning tasks and generic skills
What links to make?

Communication Skills

Graduates will be able to communicate effectively across a range of contexts

• Demonstrate oral, written, numerical and graphic communication (practical record keeping book)

• Present well-reasoned arguments (use of evidence to support claims)
Did it work?

Week 1 survey

78/84 (95%) of 2\textsuperscript{nd} yr students had never heard of GGAs

BUT! Of those who said no, 59/78 (76%) could list 1 or more appropriate skills

(in survey GGAs also included IL, ‘observational skills’, ‘independent learning’)


Did it work?

Week 12 survey

66/67 (99%) of students had heard of GGAs

BUT! Only 44/67 (66%) of those were able to appropriately link an example of a learning task with a generic skill
Feedback from stakeholders

Those students as 3rd years……(in 2006)

Comments mixed – expressed lack of interest, but did acknowledge thinking more about:

"Skills for CV"

why learning tasks were “designed in a particular way”
Implementation in 2006

Continuous improvement:

Shortened pracs – less time for group discussion
Shifted GGAs to single 50 min tute session

I lead through each, translate and give examples

Then small group work to identify and example of each from own experiences, then share with class
Conclusions

1) It was worthwhile:
   – for me
   – for the students

2) I need to be much more overt about:
   – What
   – How
   – Why

3) Students will make links IF you translate the jargon for them – important for CEQ
Thanks for your time!

Questions or comments please,

OR

I’d love to talk to you later!

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References


