



University of
South Australia

USING STUDENT FEEDBACK TO IMPROVE DESIGN OF CONTENT DELIVERY, IMPROVES ATTITUDES AND OUTCOMES.

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Background

- Bachelor of Nursing:
Scientific basis of clinical practice – 2nd year course
- 2011 >800 students
- ↑ % Mature (50% >30 years of age)
- ↑ % Enrolled nurses (EN)
- ↑ % Limited science
- ↑ % Low SES



New Curriculum 2007

“...curriculum development is an incremental process that requires administrative and management support towards a curriculum that is ‘context relevant, responsive to learners’ and ‘consistent with the goals and philosophy of the educational institution”

– Iwasiw, 2008 (cited in UniSA Nursing curriculum document)



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New Curriculum- Science Courses

- Service taught: School of Pharmacy and Medical sciences
- Few changes to content – changes were mostly with resources being made available online.
- Lectures: Body of content
- Tutorials: Application using case studies
- Science/practice nexus





How did the new course rate?

CEI 2006 satisfaction 74% → 2007 ~60%

Students recognised:

“... Feels like a 9 unit course... subject content is not specifically designed for nursing students... this would make it more beneficial”
- Off campus CEI 2007

Staff feedback:

- Students unclear about what to do ,when, & relevance



What did the students background & their grades tell us?

↑ **Non-traditional students, with
limited science background**

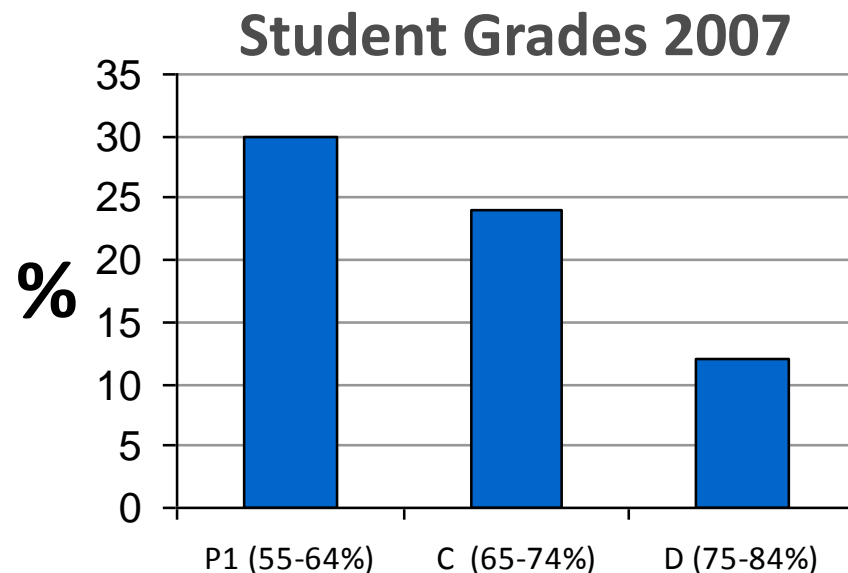
Lesser views of their self-efficacy

Lesser view of their self concept

→ Affect the achievement levels (Bandura, 1997; DEEWR 2008)

EN students > Perceived irrelevance of science to their career (TIA Survey 2010)

Combination > avoidance, procrastination, and passive learning behaviours,
with the goal of “just passing” (Bandura, 1997; DEEWR 2008)

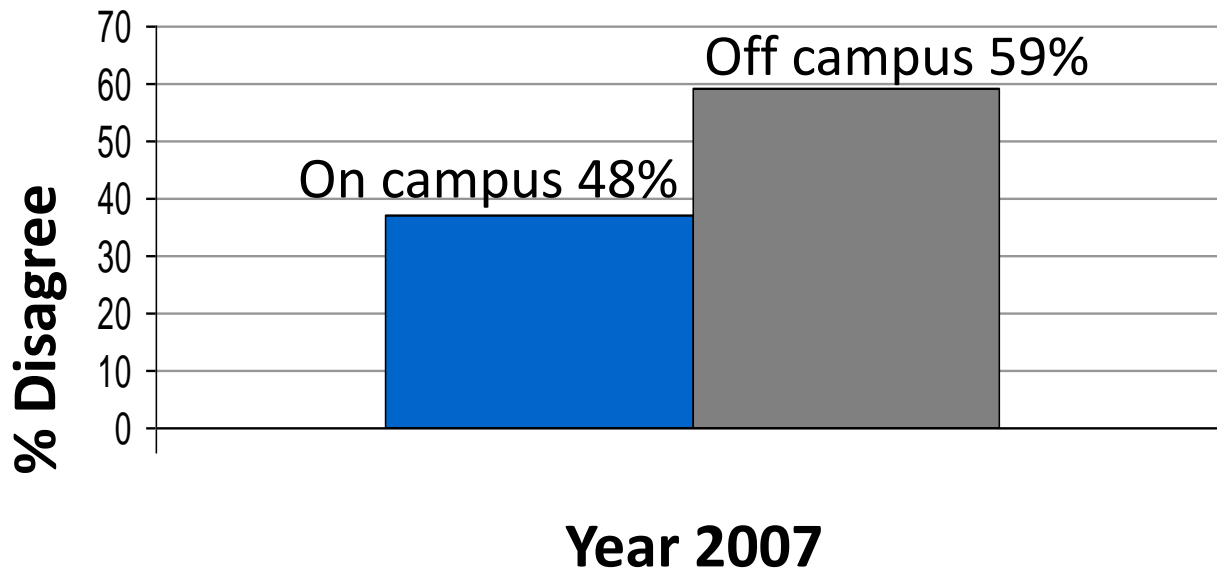




2007 CEI Q6: Workload Reasonable?

% of student CEI responses (>30% response rate)

- Student perception dominated by 'work'
- Readings! Objectives! Information overload!
- What can I use the info for?!?
- When should I use it? (coursework structure)





How to transform into a student-centred experience?

Shift focus from what the student *is* to what the student *does*

(Biggs, 1999)

“Students learn what they care about and remember what they understand”. Ericksen (1984)

Staged process of analysis and implementation:

Action Research Model:

Using student centred learning and constructive alignment

(Theroux via enhancelearning.com; Biggs 1999)

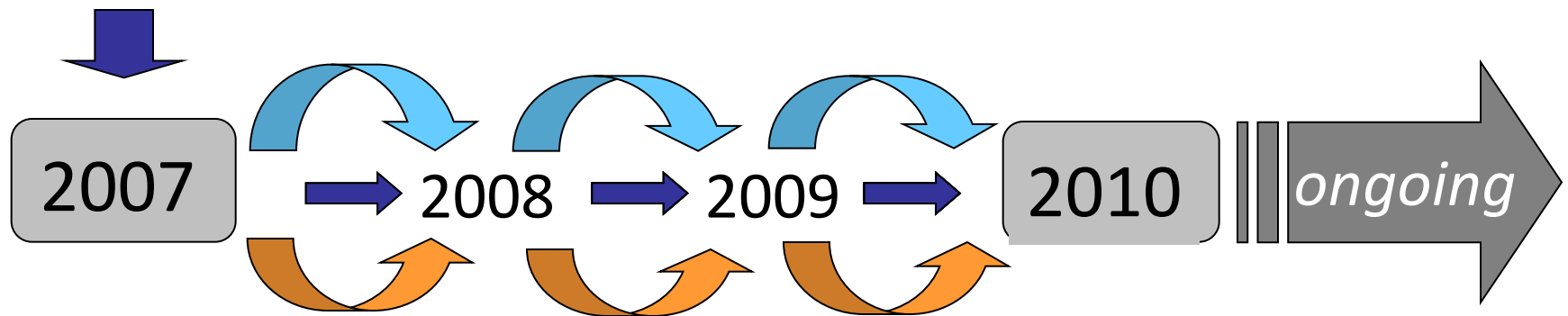


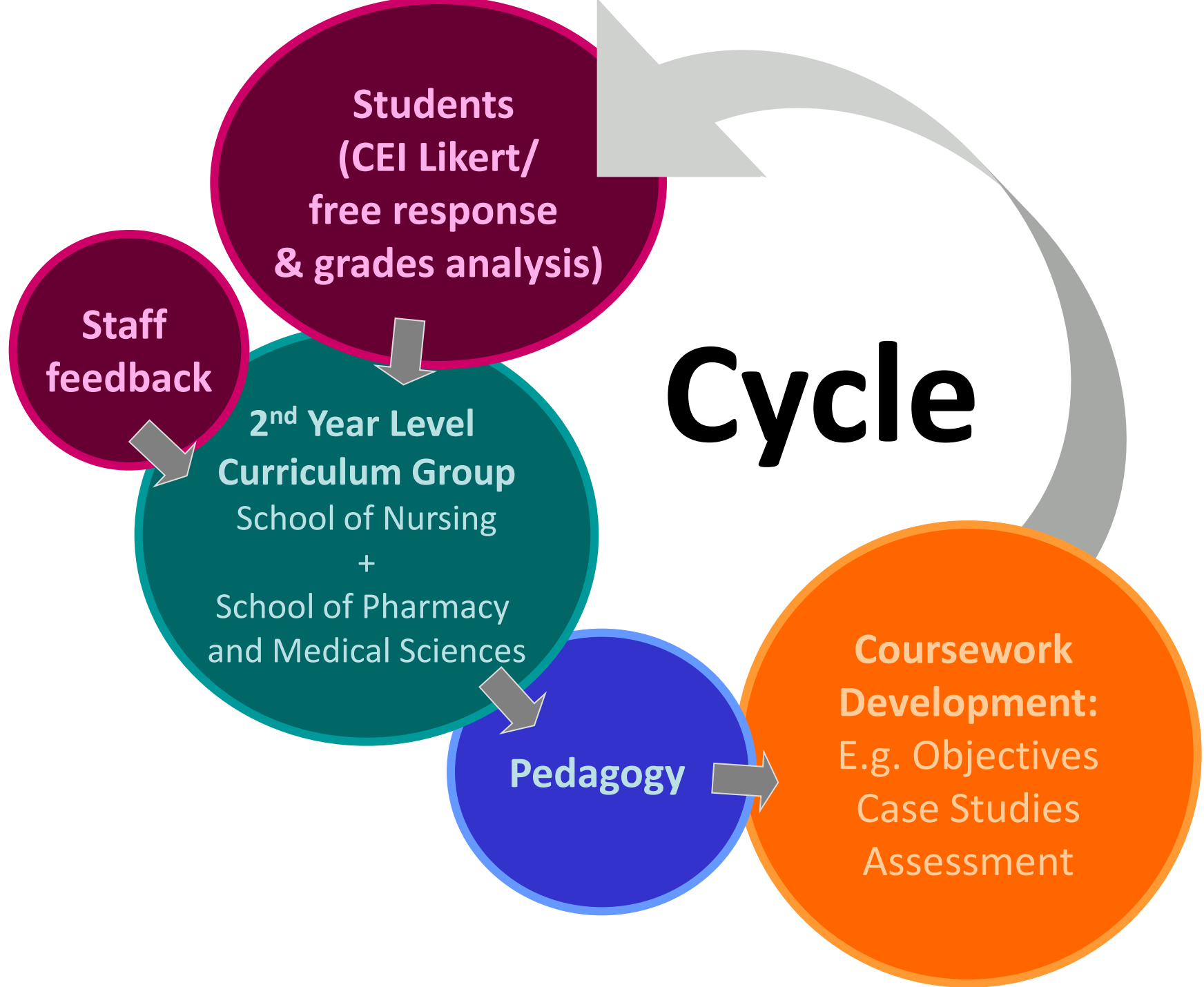
Method: Action Research Model

Greenwood and Levin (in Denzin and Lincoln, 2005)

- Allow staged changes
- Assess changes
- Manageable process

**New Curriculum
and online
environment**







Progression to Student Centred Learning

Goal (Theroux via enhancelearning.com)	What we did (examples)
Content: relevant, authentic, contextual	Curriculum committee: Nursing practice – what theory needed to evaluate case and apply to practice Key concepts Applied science
The way information is processed and used is most important.	Learning objectives re-written to be conceptual rather than specific information
Learning extends beyond the classroom.	Online activities



Progression to Student Centred Learning

Goal (Theroux via enhancelearning.com)	What we did (examples)
<ul style="list-style-type: none">• Teacher is a facilitator and guide• Students are in control of their own learning• Power and responsibility are primarily student centred.• Students master knowledge by constructing it	<p>Tutorials (example)</p> <ul style="list-style-type: none">• Tutor handbook and training – consistency• Case studies – less task and more conceptual/problem solving• Small group work• Concept mapping



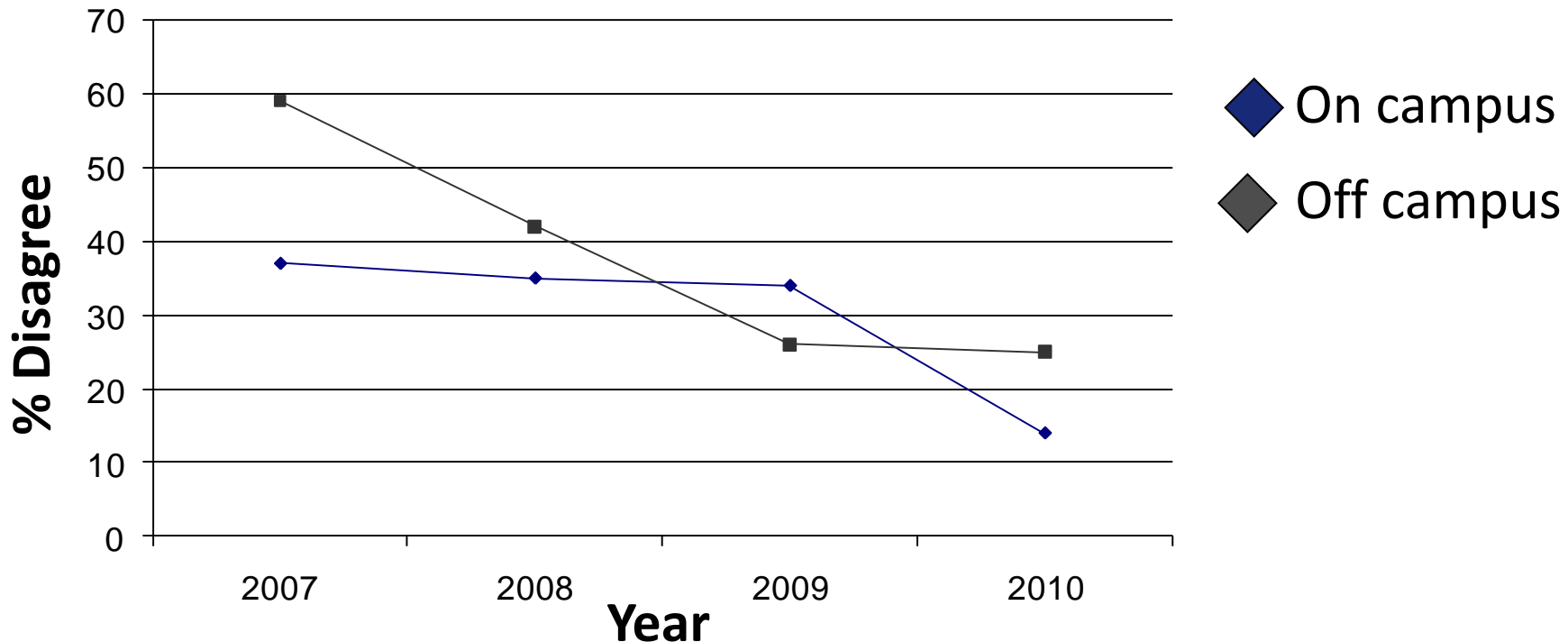
CEI Q6 Workload Reasonable?

% of student CEI responses (>30% response rate)

Significant decline in workload perception

Off campus – ↓ 24%

On campus – ↓ 23%





Workload feedback

“External study demands good time management skills and personal "drive" not to give up. Also need not be afraid to ask questions through discussion with tutors and peers. It can be personally very hard yakka at times. The knowledge presented in this course is interesting, and at times amazing, to reflect about. The way the material is presented encourages this...”

- External CEI 2009



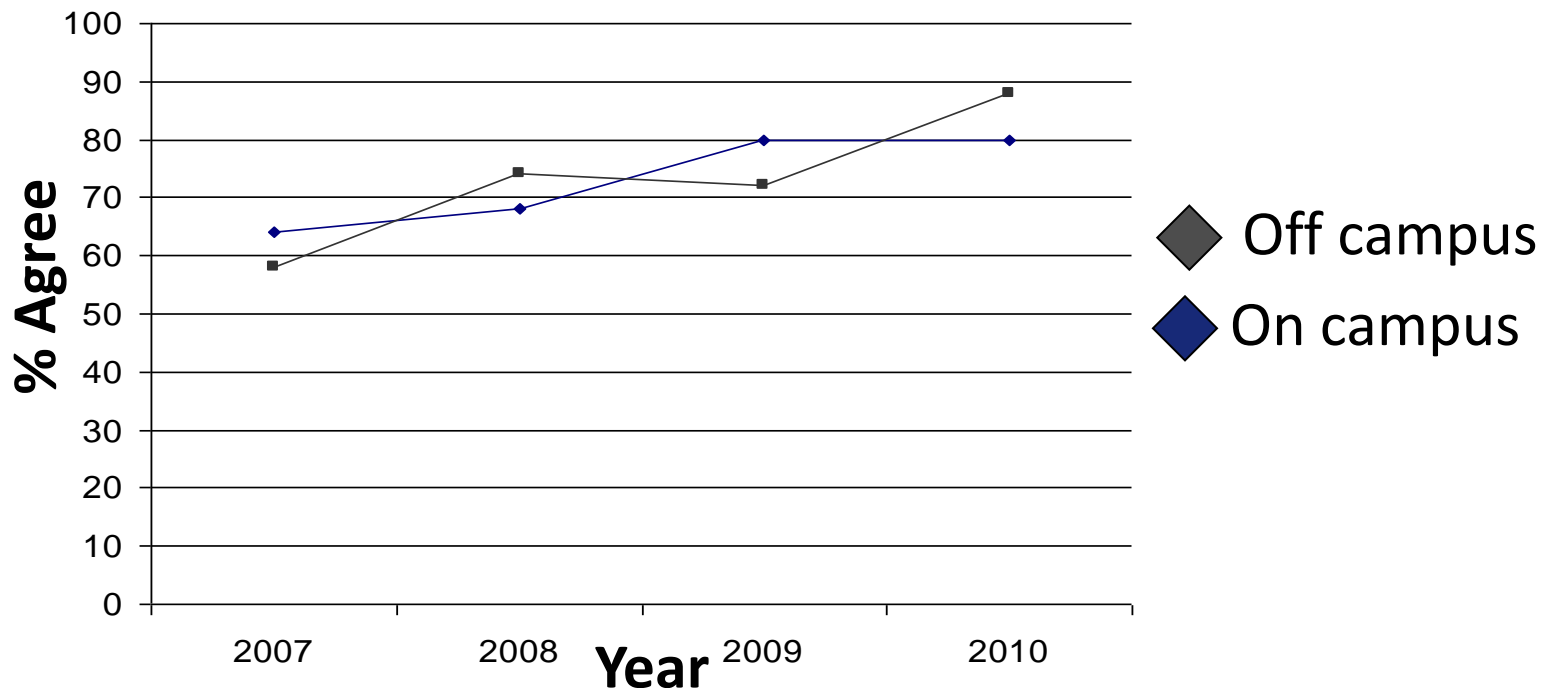
Overall Course Quality Satisfaction

Significant increase in course satisfaction

Off campus – ↑ 30%

On campus – ↑ 16%

Closer connection to nursing practice & alignment of material between science and nursing courses = greater satisfaction





Course feedback:

“I found this extremely refreshing, I have been nursing for a long time and love it but I now have a better understanding of why we do certain things especially when taking patients obs, I now have a better understanding of why they might have high or low blood pressure or why there pulse may be slow or fast because I now understand what certain health problems do to the body, and how medication affects the body, I don't look as drugs the same way any more and have a good understanding what the drugs so in the body.”

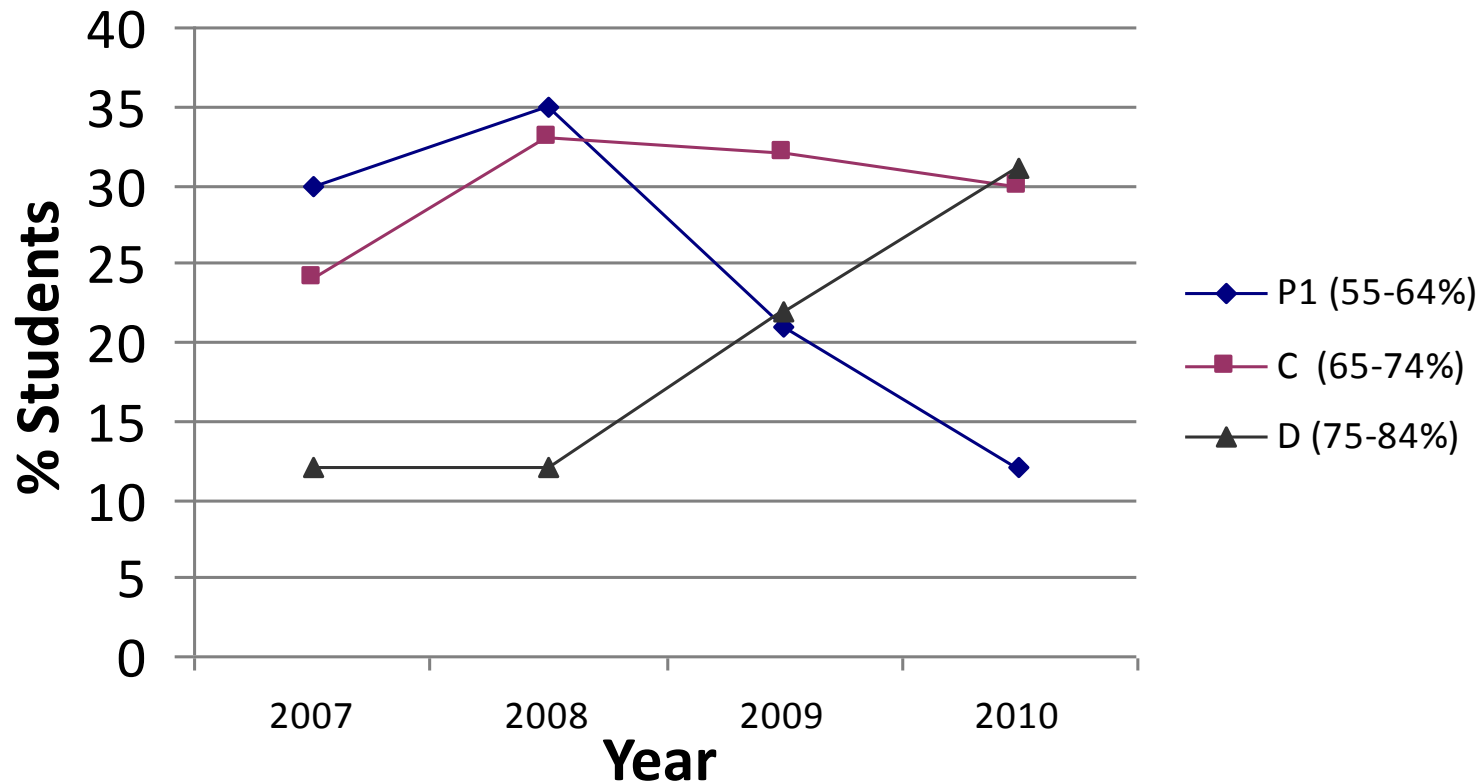
-CEI response 2009



What about student grades?

Improvement in academic outcomes

- ↑ Proportion of Credits and Distinctions
- ↓ Pass grades
- ↓ Fail grades





Outcomes

2007: New curriculum and acceptable CEI score...but...

- Student & staff feedback revealed disconnect between science/practice nexus
- Workload dissatisfaction > goal to 'just pass'
- Grades reflected this mentality

Action research model > gradual course development



Outcomes

- Strong focus on clinical relevance of science > *why* this help you perform your job better
- Student centred curriculum > tutors are facilitators
- Problem solving and concept maps > students develop their own knowledge

Student feedback + pedagogical underpinnings

- > improved student perceptions of workload
- > increased student satisfaction
- > improved student academic outcomes



Ongoing

- After only 1 year of graduates entering workforce...
- New curriculum 2011
- 18 units science > 13.5 (25% reduction)
- Significant changes to come...



References

- Bandura, A. (1997) *Self-efficacy: the exercise of control* (New York: W. H. Freeman).
- Biggs, J. (1999) What the student does: Teaching for enhanced learning. *Higher Education Research & Development*, 18 (1):57-75
- Department of Education, Employment and Workplace Relations. 2008. Participation in Science, Mathematics and Technology in Australian Education Report. Accessed online from www.dest.gov.au/ 25/8/2010
- Ericksen, S. (1984). *The essence of good teaching*. San Francisco: Jossey-Bass. p 51.
- Handbook of Qualitative Research, 3ed Edition. Denzin, NK & Lincoln, Y.S. (2005) SAGE. *Chapter* : Greenwood DJ and Levin M "Reform of the social sciences and of Universities through Action Research"
- Iwasiw, C., Goldenberg, D., and Andrusyszyn, M. (2008). Curriculum development in nursing education, 2nd Ed, Sudbury, Mass. Jones and Bartlett.
- Johnson D, Johnson R. (1991) *Learning Together and Alone* ed3.; Allyn & Bacon, Sydney
- Novak, J. (1998) *Learning, Creating and Using Knowledge: Concept Maps as Facilitative Tools in Schools and Corporations*; Lawrence Erlbaum Associates, Inc; New Jersey, pp 24-25
- Theroux, P (website) www.enhancelearning.ca, accessed online 20/6/2011
- The Technology Industry Association Survey (2010). Accessed online from www.tia.asn.au 20/6/2011