



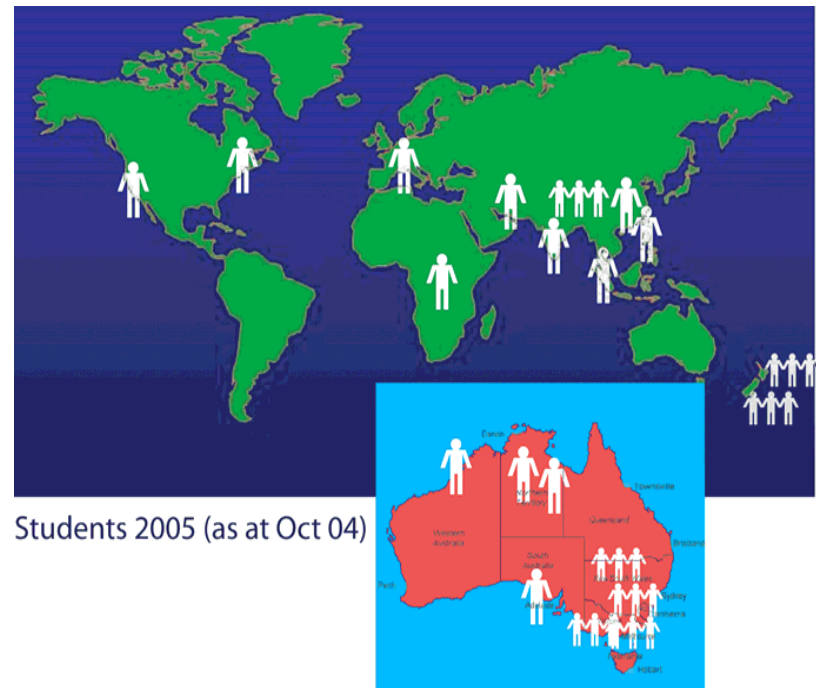
Improving student experience of virtual teamwork in an online postgraduate coursework program in Veterinary Science

Jenny-Ann Toribio, Ruth Laxton,
Hannah Forsyth



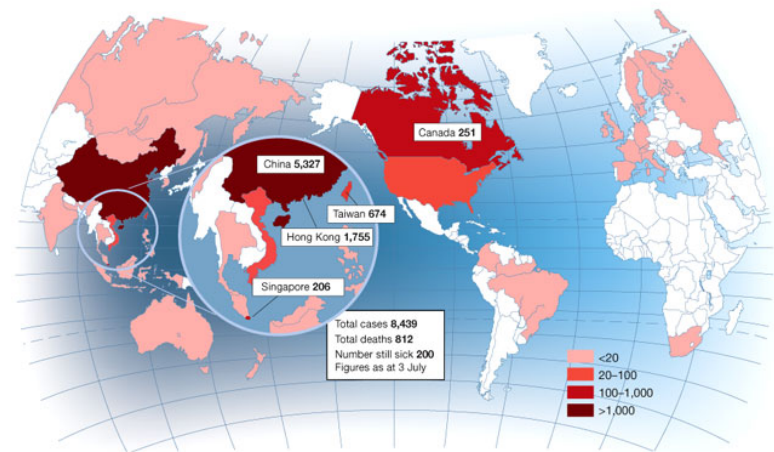
Background

- Postgraduate program in Veterinary Public Health Management (VPHMgt)
- Articulated, distance postgraduate program, first offered in 2003
- Students located across Australia and around the world



Why ask these people to work in virtual teams?

- Management of animal and public health issues needs to be conducted across space, time, organisations and disciplines
- Graduate Attributes state that VPHMgt graduates will *Work effectively with others on an individual basis and in multidisciplinary team situations*





What sort of teams they work in

- Every unit of study contains a group project worth up to 40% of total unit mark
 - Students are allocated to different groups for each unit
 - Work asynchronously in Discussions in WebCT, increasingly supplemented by live chat
 - They are typically activities that:
 - are authentic tasks which would typically be a team task in the workplace
 - require students to work towards a defined outcome, usually containing a problem to be solved, requiring a diverse range of knowledge, skills, research and experience
-



Differences between virtual and face to face teams

- Time issues
 - Time lag (asynchronicity)
 - Time zones (global classroom)
 - Time and task management (differences in personal styles, priorities and expectations are less visible)
- Lower levels of control over and knowledge of group members
- Communication towards developing a product under pressure without non-verbal cues

All the typical characteristics of asynchronous online discussion are intensified in virtual group work



What might be some other differences?

What problems might there be?



Problems we have observed

Inception	<ul style="list-style-type: none"> Starting the task before ensuring all team members are clear on what needs to be done
Role Allocation	<ul style="list-style-type: none"> Role confusion in teams / lack of clarity of responsibilities Reluctance by some to take leadership role in group
Expectations	<ul style="list-style-type: none"> Disappearing team members Some members having higher expectations of regularity of interaction
Problem Solving	<ul style="list-style-type: none"> Individuals' different levels of commitment not made explicit Assumptions / values not made explicit Slowness of teams in identifying emerging problems
Decision Making	<ul style="list-style-type: none"> Reaching consensus took too long Many students shy of taking the lead
Execution	<ul style="list-style-type: none"> Problems with document version control Focus on task to the exclusion of process
Time Management	<ul style="list-style-type: none"> Inefficient task processes Time wasted on ineffective admin tasks Different preferences: Liking to be organised well in advance vs. working at the last minute
Conflict Resolution	<ul style="list-style-type: none"> Most conflict at stage of finalising product Suppressed emotional responses Cultural misunderstandings
Net-Etiquette	<ul style="list-style-type: none"> A few students being critical before fully understanding the issue

Inception Example:

Student A likes to be prepared early and posts a draft of one section of the assignment without any prior discussion with the group.

This forms the basis for other students' substantial contributions.

Two weeks later, student B points out that the approach will not address assessment criteria.

Conflict Example:

Student X feels strongly that their argument in one section of an assignment is important. Anyway, for the last 3 weeks no one seems to have commented on their contribution.

Student Y feels strongly that they have frequently pointed out a flaw in student X's argument over the last 3 weeks but feels their opinion is being ignored.

Student Y, nervous about the approaching deadline, calls on students W and Z to support leaving out a section that student X has contributed.

Student X withdraws from the process and lets the group know they feel they have nothing of value to contribute.



What did the students think?

- A questionnaire was used to identify student perception of virtual group work, both positive and negative
 - To assess what students say about their experiences in the following stages of group work:
 1. Inception
 2. Role allocation
 3. Decision making
 4. Problem Solving
 5. Conflict resolution
 6. Net-etiquette
 7. Execution
 8. Time management
 - First year students completed identical questionnaires in 2003 and 2004.
 - 2003 Results formed the basis for preparation for virtual group work with the 2004 cohort.
-



Preparation for virtual group work

- Preparation at 2003 orientation residential
 - Team building activities at first residential
 - Group assignment assessment criteria related to team effectiveness were specified and explained
 - WebCT training and netiquette discussion
 - **Plus** Student online forum was established for socialisation mid-2003
- Preparation at 2004 orientation residential included this *and*:
 - Sessions focused on working in virtual teams
 - Presentation by educational designer on working in virtual teams
 - A group activity brain storming strategies for dealing with common problems in virtual group work
 - A sample teamwork agreement which student groups could choose to use was presented and discussed
 - **Plus** more online socialisation was introduced via the student online forum from the start of 2004



Student perceptions

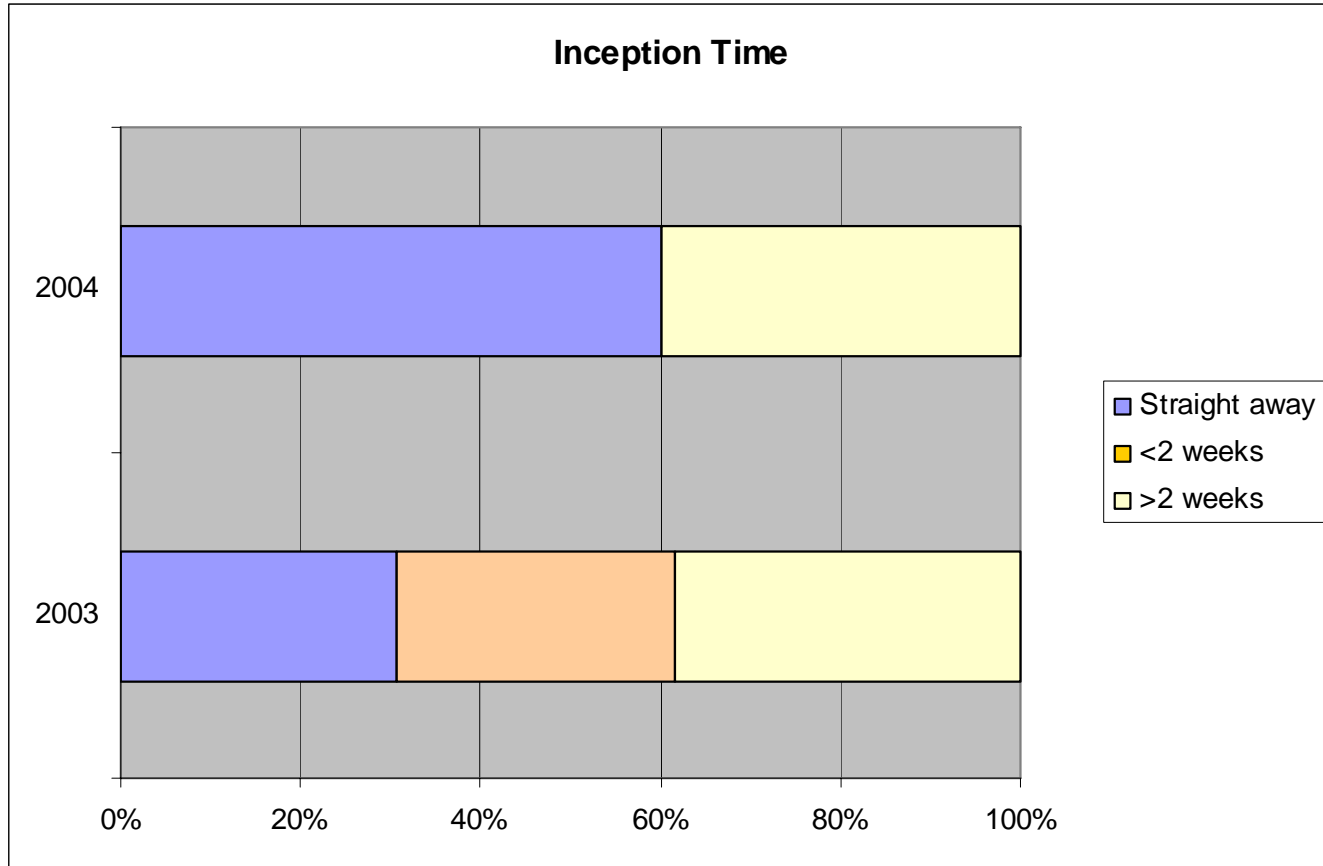
2003 – students given little preparation for online group work

- Inception a problem: 64% said it took up to or more than 2 weeks to understand the task
- 79% reported conflict resolution to be effective or very effective

2004 – students given more preparation for online group work

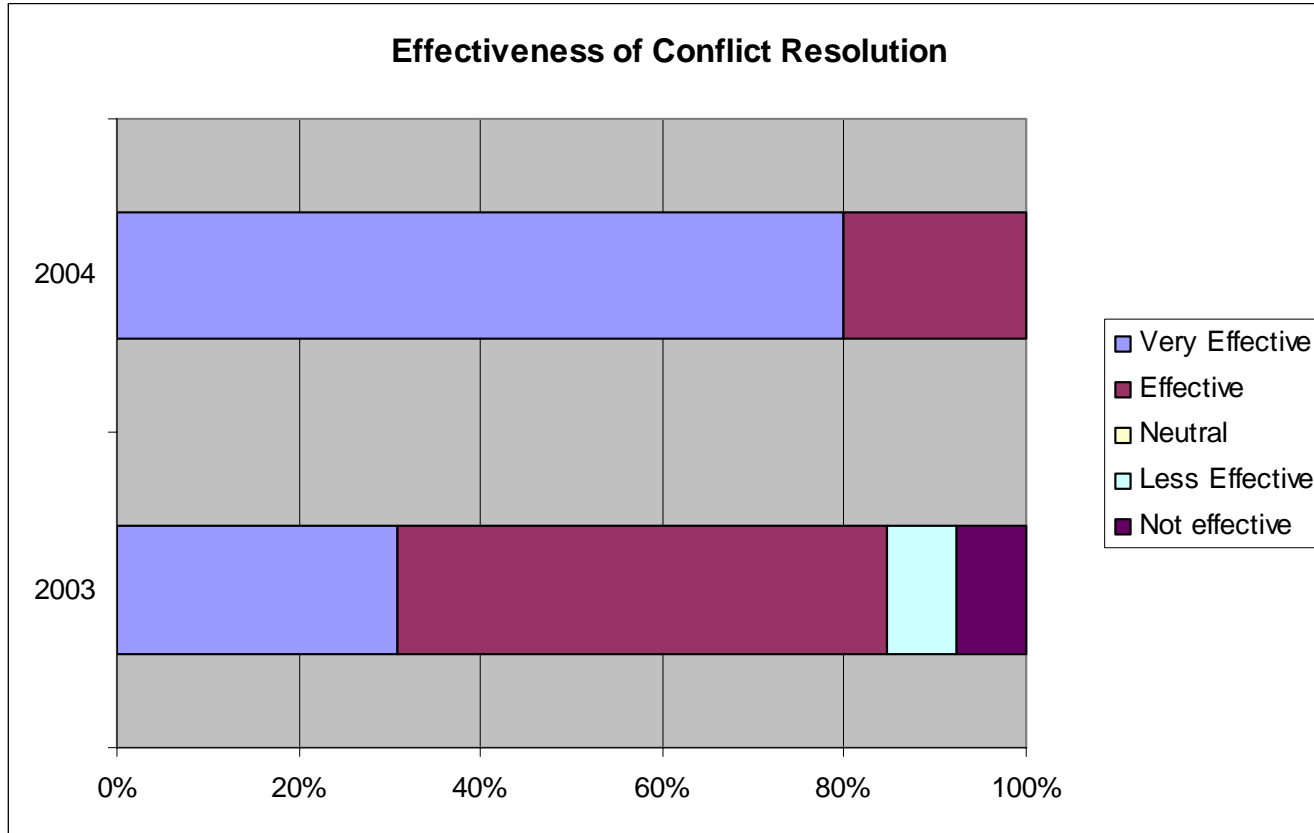
- Inception improved: 60% said their group understood the task straight away
 - Conflict resolution identified by students as a strength of the cohort – 100% reported effective or very effective
-

Comparison of 2 Cohorts - *Inception*



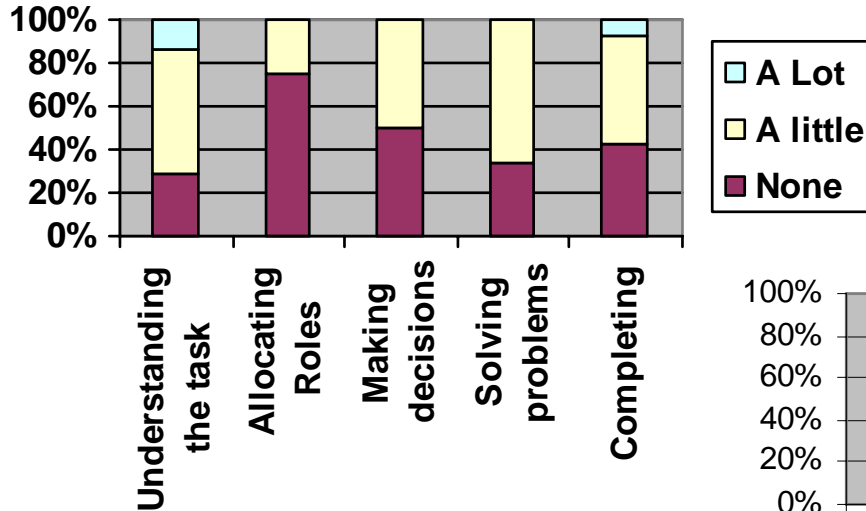
Comparison of 2 Cohorts

– *Conflict resolution*

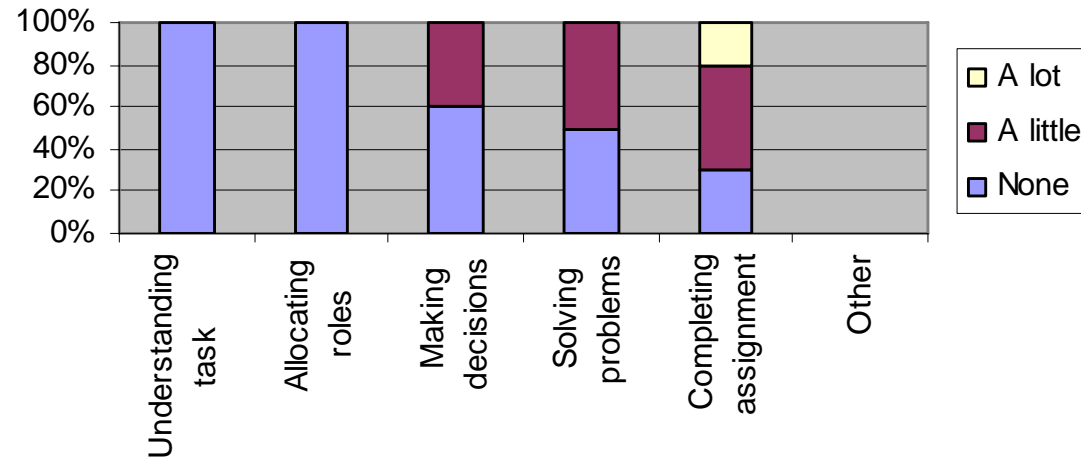


Other Results – where conflict arises

Stages where conflict arose 2003



Stages where conflict arose 2004



Most conflict in online group work arises when the assignment is nearing completion



Further responses in 2005

- Requirement for Student Contribution
 - Changed assessment policy (50% group mark for under-contribution, 0% for failure to contribute)
 - Promoted use of live chat
 - Helps to facilitate inception (particularly role allocation), time management, conflict resolution
-

Some useful strategies

Strategy

Benefit

1. Sessions - How people function in teams

• Understanding of working with different personality types

2. Sessions - Virtual team work and overcoming problems

• Highlights challenge of virtual teamwork and alternate strategies

3. Formal training – WebCT & net-etiquette

• Avoids technical problems and misunderstandings

4. Online student forum

• Develops relationships & cultural/social awareness

5. Group assignment agreement

• Makes expectations explicit & generates commitment

6. Assessment criteria – Team effectiveness in group assignments

• Motivates skill development & emphasises their importance

7. Anonymous discussion thread – Learning about virtual group work

• Makes skill development & reflection explicit



Continuing Challenges – any suggestions?

- A few students continue to be absent
 - A few students seem to forget what they learned about potential problems with virtual group work once they encounter the reality
 - When stressed, net-ettiquette can become a lower priority for a few students
 - Some students show reluctance to contribute – insecurity?
-