guidelines

The Large Class Teaching Guidelines

The guidelines for teaching with large classes are divided into four areas.

They were developed by a working party derived from the Teaching Large Classes project team.

In developing the guidelines, the working party relied on a variety of sources for information.

- A vast range of related research and education literature.
- Information from responses to a survey of over 40 lecturers of large classes around Australia conducted as part of this project.
- Summaries of discussions that occurred at the 1st National Workshop in July 2001 for large class teachers participating in the project.

The guidelines serve to distil all of this information in a way that makes it more accessible and useful to the practitioner and/or large course administrator. Each set of guidelines is underpinned by educational theory and principles.

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Planning & Teaching

1. Provide optimal course information and meaningful expectations for students.

- Devise course outline covering objectives, schedules, assessment, texts, office/contact hours etc. as well as an outline of expectations of students in terms of in-class behaviour, participation, workload etc.
- Provide clear marking or assessment criteria well in advance to students and tutors/markers and examples of poor, good and excellent work in line with criteria.
- At the first lecture, hand out a short survey on which students can introduce themselves. Follow up the next week with some feedback to show you have at least looked at them (eg. summary of countries represented, interesting or humorous comments, etc).
- Consider providing a course web-site for students to access unit outlines, FAQ's, practice exams, bulletin boards and announcements etc. If one exists, promote and explain its use in class.
- Provide and explain course outline at first lecture. Inform students of office hours, where and how to get help, School/Faculty facilities, helpful web sites, learning support and other general information.
- Consider converting the course outline into a set of questions (FAQ) to improve likelihood of students reading it. For example, "When is the mid-semester test?" "What is the School phone number?".
- Establish 'ground rules' from the start in terms of behaviour and language in lectures and tutorials, attendance, assessment policy and group work participation etc.
- Regularly promote the use of the learning guide and cross-refer to set texts. Promote attendance at tutorials &/or Peer-Assisted Study Sessions.
- Inform students of standard forms and specific policies they may need to access or be aware of.
- Inform students of the mechanisms for ongoing feedback (online, email, tutors etc.)

Why?

Students are not as informed or aware of how a course operates as we often think.

First year students are particularly vulnerable to uncertainty and do not know what it is they do not know. The first few weeks are often overwhelming and they do not always remember what is said at orientation or introductory classes. By providing comprehensive course information, students are able to return to that information later in the course when they need to check or confirm details. This reduces confusion and means students are less likely to seek further advice during the semester.

Clarifying the expectations of the students – you of them and they of you – is also important as it helps to establish the climate and organisation of the course. It is important that these expectations are repeated and applied consistently (with flexibility as appropriate) throughout the course.

Examples

- Human Movement Studies at UQ employs a student liaison officer to coordinate administrative tasks such as lab and fieldwork, extensions etc.
- **Case Study in Biology 1012, University of Queensland**
  In BIOL1012 at UQ use of the course web site is promoted in class. Via this site, students have access to the course outline, FAQ's, practice exams, a bulletin board and course announcements.
- **Peer Assisted Study Sessions**
  These sessions, conducted by 2nd and 3rd year students, are designed to answer questions regarding elements of the course, for example, examinations, as well as to help support and guide students through their first year as a member of a very large class.
- **Making new students feel welcome**
  Check out how University of Technology Sydney make their new students feel welcome during orientation.

2. Create a welcoming and engaging environment

- Identify needs in terms of physical spaces ie. shape, size and facilities in lecture theatres, labs and tute rooms. Book these in advance.
- Be willing to treat "less than ideal" environments with a degree of flexibility and prepared to adjust to the physical constraints.
- Let students know you are committed to teaching.
- Seek literature on teaching large classes. Share learning implications with students, including the dynamics and workload involved in teaching large classes.
- Use techniques and activities to minimise physical and psychological distance from students and reduce students' feelings of anonymity. See examples
- Be honest with students up front about the problems with teaching large classes and how you will attempt to reduce or overcome these.
- Be guided by the live audience - watch for signs of confusion, puzzlement, boredom. See examples
- Consider providing a box for students to post their "unanswered questions" or "burning issues" and address these in lectures or online.

Why?

Learning is a social activity according to constructivist theories of learning.

Therefore, learners in large classes need opportunities to situate their learning in relation to their life experiences and previous learning, and to share their learning process with others.

Motivation to learn is also important to gaining and maintaining attention in class.

Students will be more motivated if the environment is inclusive and respectful of their background knowledge, needs, interests and aspirations. Engaging with students in large classes and getting them to engage with each other is harder but there are a number of ways in which this can be done effectively.

Examples

- **Reducing student anonymity and fostering involvement**
  This site offers more detailed descriptions of methods to achieve this aim. Listed below are some of the suggestions worth consideration.
  To reduce student anonymity, consider:
  - moving around lecture theatre with lapel microphone, question and answer;
  - spending 15 mins before/after class to speak with students;
  - using think-pair-share in lectures;
  - use videos, humour, stories etc;
  - student autobiographical sketches in Week 1
  - meeting 2-4 times during semester with a representative group for feedback, and
  - making an effort to learn and use some names.
- **Personalising Large Classes**
  For tips on personalising large classes
- **Seating Arrangements for Large Classes from the University of Melbourne**
  For ideas on rearranging seating plan
- **Improving attendance to large Classes**
  For ideas on improving attendance
- **Tips for the first few classes**
  For more tips on what else you can do in the first few classes of the semester

3. Employ a range of learning resources

- Order texts, study guides and readings well ahead of time to ensure enough copies are available in Week 1.
- Structure learning of content to make sure you use set texts, study or learning guides, readings and activities or web- and computer-based activities.
- Devote resources to assist students to complete major assessment tasks.
- Explain and promote the use of texts, readings and study or learning guides in class. Cross-refer to course and other learning materials in lectures.
- Encourage students to find and collect their own learning resources (eg. news articles, web-sites, etc).
- Provide tutors or other teachers with support through regular meetings or guides etc. Also see Tutoring and Demonstrating

Why?

Access to a range of paper-based, web-based and physical resources encourages greater independence in students and reduces reliance on staff as a source of information.

It also supports a range of different learning styles and provides opportunities for learners to access and consolidate information.

The likelihood that students will access and use the available resources depends on the role these resources play in assessment preparation. See also Planning and Conducting Assessment.

Examples

- **Chemistry workbooks from the University of Queensland**
- **Case study in Chemistry at University of Queensland**
  In Chemistry A at UQ, Lawrie Gahan provides 4 learning guides (or workbooks) in both paper- and web-based forms. The CHEM1012 workbooks can be publicly viewed at the first link listed above.
- **Discipline - specific web-based educational resource sites**
  For links to a range of discipline-specific web-based educational resource sites

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4. Vary learning experiences

- Plan for a variety of teaching methods and different learning activities at different times. See examples. In planning these, consider class size, layout of the room etc.
- Plan for "fun" exercises. Even if the topic is boring, questions can be answered in a fun way (eg. throwing a ball to students to answer a question).
- Plan to include some kind of analytical, problem-solving or divergent thinking activity in each lecture or lab/tutorial in accordance with course learning objectives.
- Plan for lecturers and tutorials to be integrated and complementary learning experiences where the links are made explicit.
- Use a variety of presentation strategies including models, diagrams, graphs, photographic images, stories, newspaper articles, videos, case studies, etc.
- Plan to capture students' attention at the beginning of each lecture - use an interesting scenario, quotation, problem or story etc.
- Vary student learning activities as appropriate, including conventional lecturing, individual problem solving, group discussion, role plays, case studies etc.
- Take time before an activity (such as a role play or case study) to explain how it is to be conducted or used. Leave time afterwards to 'debrief'.

- Limit direct instruction to 15-20 minute periods, interspersing with questions, problem-solving exercises, discussions etc. See examples

Why?

Students are not always self-motivated and excited about learning. It is important that the teacher plans a variety of learning experiences and activities they want the students to undertake, for unless students are interested and engaged in the learning experience (lecture/class/study), the quality of their learning suffers.

Teachers need to utilise a range of different learning experiences and activities across the duration of the course and within each learning session.

Even the most exciting and engaging learning activity will quickly loose its impact if it is used week after week. By devising challenging, surprising, amusing, or realistic dilemmas or tasks for the students to undertake, the teacher will engage their interest and attention for a longer period of time and will enhance the quality of their learning.

Examples

- **Range of teaching and learning strategies**
- **Interesting ideas for large lectures from the University of Melbourne**
  For tips and interesting ideas for large lectures.

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5. Encourage active note-taking

- Consider the types of notes students need to take to really think about lecture material. For example, use incomplete (skeletal) lecture notes with spaces for students to complete sentences, exercises or problems to allow for a personalized set of notes.
- Explain note-taking procedures to students and discourage students from spending the entire lecture taking notes.
- Demonstrate efficient note-taking strategies for use with assignments, texts, lectures etc.
- Provide lecture outlines or study guides to act as a framework for note-taking.
- Allow time towards the end of class for students to write a summary of the lecture/tutorial.
- Have students compare notes with the lecturer or with each other.

Why?

Almost all students use an inefficient and passive form of note-taking when taking notes from lectures or texts.

The strategy most students use is called copy-delete. This involves:
- listening to the lecture or reading the text, and
- trying to capture the content and structure in the exact form that it is been presented.

The student simply deletes all extraneous information and words. This strategy requires very little thinking and on its own does not lead to understanding.

The old joke of the definition of a lecture as the "process by which the notes of the teacher are transferred to the notes of the students without going through the heads of either" very much reflects what happens in many classes. Unless students;
- are actively encouraged to take notes in different ways, and
- use their notes during learning activities in private study and with others

they will continue to take pages of notes with very little benefit to the quality of their learning.

Examples

For tips on note-taking that you can share with students, try these web sites:

- **Note taking from the University of Minnesota, Duluth, USA**
  A well-reviewed site that is sponsored by Hiawatha Broadband Communications
- **Note taking information from a course taught at North Carolina University, USA**
- **Guide for note taking from the Muskingum College, New Concord, Ohio, USA**
- **Information on note taking from the Centre for Excellence in Teaching and Learning, Pennsylvania State University**

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6. Clarify learning goals for each session

- Identify the key concepts to be taught in each class (maximum of 4 per class) and plan to spend a set amount of time on each. Collect relevant examples which may be used to 'flesh out' ideas and theories.
- Illustrate or explain each main point using a variety of models, metaphors, analogies &/or examples.
- When more than one person teaches the course, meet to discuss and clarify key teaching points for each session/lecture and cross-refer to these in subsequent classes.
- Flag each goal as you go through the lecture to reinforce the goal and to point out where it is covered.
- Highlight key points using phrases such as "The basic point to be remembered here is...".
- Ask students to write down the main points at the end of each class and compare with each other.
- Towards the end of class, draw together the purpose of the lesson by getting students to summarise or reflect on some part of the learning experience.

Why?

Student achievement is related to having a clear structure and set of goals to guide their thinking and learning during class and private study.

Being aware of the goals they are expected to achieve also helps students to monitor their own learning and check their understanding against the stated objectives.

Examples

- **Clarifying learning goals**
  For ideas on how to effectively clarify learning goals at the start, during and at the end of class.

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7. Incorporate content AND learning processes

- Avoid 'over-stuffing' classes with content.
- Plan to use lectures:
  - as a framework for linking materials from tutorials, labs, texts and small group work &
  - to motivate and keep students on track, rather than simply deliver course content.
- Plan to use class time to plan and prepare work that contributes to assessment tasks.
- Consider giving students the content before class and having them use and apply this content working interactivity during lectures or tutorials.
- In lectures, cross refer to tutorials/lab work and small group work.

- Include brief problem-solving exercises and discussion with the teacher modelling the solution authentically (eg. solving aloud an unseen problem).
- Identify and model the kinds of 'thinking' associated with the content. Demonstrate applications of this by 'thinking aloud' in class.
- Model learning strategies in class that can be applied to the content. For example note-taking, critical writing, synthesis of ideas, etc. Also see examples

Why?

If students are to become life-long learners they need a range of learning strategies and skills which they can utilise with new material.

If we emphasise content and expect them to have the skills to learn and process it, we are failing in our role as teachers. Students often come to university with a limited range of learning strategies. Part of our role is to teach them strategies that are more effective and appropriate to their future learning needs. For ideas about how to teach these skills, see examples section.

Examples

- See Chalmers, D. & Fuller, R. (1996). Teaching for learning at university: theory and practice. London : Kogan Page.
- **Part 3** of the book is entitled 'Teaching learning strategies in context' and contains case studies and ideas for explicitly teaching students effective learning and problem-solving strategies.
- **Teaching Thinking Skills from Griffith University, Queensland**
  To access excellent ideas about ways to teach various thinking skills to students

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8. Regularly monitor students' learning

- Provide regular opportunities for students to check their learning and understandings. Devise activities that require students to think about the key facts and concepts, including MCQ's and short answer questions used in class or given on course web-site with no marks attached.
- Another way to have students identify what it is they do and do not know is to have them verbally explain concepts to someone else. Use stimulus questions to start discussions in which students are required to explain key concepts to each other.
- 'Instant questionnaires' and 'minute papers' (see examples) give students an opportunity to indicate what is working well or what could be changed or improved. Use this feedback to answer students' questions in the following week/lecture.
- Allocate approx. 5 minutes towards the end of each lecture for students to summarise the main points &/or reflect on their understandings of a concept. Collect these from students and select a sample to read through and share during the following week's lecture to address common issues and questions raised by students.

Why?

When students are aware of their own learning, having metacognition or metawareness, they are able to determine what they know, what they don't know, and match this what they should know. When students get this kind of feedback about their own learning on a regular basis, either through their own reflection or learning activities or through the teacher's feedback, they are much better able to take charge of their own learning.

Research shows that student achievement is positively related to learning environments in which they are encouraged to be independent learners and have choice in the learning activities. From the teacher's perspective, it is just as important to regularly monitor students' learning so as to ascertain the effectiveness of the teaching and learning activities they have planned. The teacher can then actively identify, diagnose,

and rectify any misconceptions in students' understanding or other learning problems, well before it is too late to implement strategies to get student learning back on the right path.

A final exam as means of ascertaining students' learning is simply too late, and too little.

Examples

- **Useful strategies for monitoring learning**
  Activities that require students to think about what they are learning include:
  - Minute papers
  - Buzz groups
  - Informal MCQ tests etc.
- **Economics at University of Queensland**
  John Asafu-Adjaye at UQ requires his ECON1320 students to complete 5 Computer Managed Learning (CML) quizzes during semester. These quizzes are optional but each is worth 3% if completed. CML quizzes are a good way for students to gauge their own learning and as students are allowed to complete them outside class time, CMLs actively encourage them to check their understandings against their peers'.
- **Using Informal Writing Exercises**
  This site offers ideas on how to use informal writing exercises in large classes as a form of formative assessment
- **Nine Guidelines for assessing student Learning**
  This site also contains 9 succinct guidelines or principles for assessing student learning provided by the American Association for Higher Education.

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9. Plan and prepare for group work

- When planning group work, think carefully about what you wish students to achieve and adjust the size accordingly. More students per group mean fewer groups to monitor and assess, however certain tasks may require smaller, more interactive groups.
- Plan to devote class time to establishing groups and for groups to work together.
- When introducing group work, outline expectations and provide guidance on how to coordinate the group project.
- If two or more groups are looking at the same topic or question, plan to have groups give feedback to one another.
- Use group presentations or "jigsaw" activities (see examples) to allow groups to share what they have learned with others.
- Only require students to meet outside of class time when it is central to completing the assigned task and therefore achieving the learning objectives.
- If working outside of class time, remind groups to get contact details for one another to enable extra meetings. Consider having students write down all names and contact details on a sheet in class and provide lecturer/tutors with a copy also.
- Develop measures to increase accountability on individuals working within groups. Eg. before finalising grades, have students agree on a percentage for individual contributions such that it adds up to 100%. Take this into account when assigning grades.
- See also Planning and Conducting Assessment.

Why?

Research shows that appropriately planned group work (i.e. groups are given clearly defined and achievable goals) promotes deeper and boarder learning outcomes for more students. Effective group work can help students clarify ideas through discussion and debate and develop interpersonal and communication skills.

It allows teachers to explicitly encourage awareness of and use of problem-solving and critical thinking skills.

Furthermore, group work helps 'ween' students away from considering teachers the sole source of knowledge and understanding. Research shows that student to student feedback may be as useful to learning as feedback provided by lecturers, with the added bonus of lessening the burden on teaching staff.

Some students may use group work as an opportunity to 'loaf', so accountability measures are needed such as giving marks (agreed upon by the group) for individual input and participation. To increase motivation, group work tasks should relate to course objectives and play a role in assessment, rather than being used in an isolated or esoteric way.

Examples

- **Enhancing student involvement**
  This site offers tips on how to enhance student involvement in group work and discussions.
- **Discussions about cooperative and collaborative learning**
  This site provides a series of easy-to-read discussions on cooperative and collaborative learning.

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10. Use technology to support learning

- Consider the types of presentation that best suit course content and choose technology accordingly. For example: Power-point presentations may not suit if lots of demonstrations &/or flexibility are required.
- Subject web-sites, bulletin-boards, etc. need to be explained and cross-referred to in class.
- Find out before the start of semester how to use the technology in the classroom. Learn how to trouble-shoot or where you can get technical assistance in a hurry.
- Ensure all students know how to operate the technology you are expecting them to use. If they cannot, teach them in class or give them opportunities to learn it somewhere else.
- Avoid letting the online technologies drive the learning and ensure that the teaching and learning drives the choice of technology.
- When choosing teaching and learning technology, consider whether or not it increases access to faculty members, helps students share useful resources, and/or provides for joint problem solving and shared learning. Also see examples.

Why?

In deciding to put learning resources online, you need to be tough-minded about the software- and technology-assisted interactions you create and buy into.

Don't let the technology drive students' learning experiences.

Avoid materials that are simply didactic, and search instead for user-friendly hardware, software, and communication vehicles that are:

- interactive,
- problem oriented,
- relevant to real-world issues, and that
- evoke student motivation.

Communication technologies that increase access to faculty members, help students share useful resources and allow problem solving and shared learning can augment face-to-face contact in and outside class time.

Putting in place appropriate, additional sources of information and guidance for students can strengthen faculty interactions with all students, especially with shy students who are reluctant to ask questions or challenge the teacher directly. It is sometimes easier and more efficient to discuss values and personal concerns in writing than orally, since inadvertent or ambiguous nonverbal signals are not so dominant. Furthermore, as the number of commuting part-time students and adult learners increases, technologies provide opportunities for interaction not possible when students come to class and leave soon afterward to meet work or family responsibilities.

Examples

- **Using technology as a lever**
  An article from the American Association for Higher Education on using technology as a lever to learning.
- **Assorted resources for technological literacy**
  This site contains an assortment of resources to assist teachers and students acquire the necessary skills and concepts that underpin technological literacy.
- **Explanations of the software packages that are available for supporting higher education teachers**
  This site describes the range of various software packages available to support teachers in higher education from web-browsers to video conferencing and real time chat programs.
- **Good Practice in online design**
  This article describes good practice for designing online courses.

Planning and Conducting Assessment

1. Align assessment tasks with course objectives

- Define goals for the course (written as what the student might be expected to achieve) and ensure students understand them and how they apply to the assessment tasks.
- Check that assessment tasks assess only the course objectives.
- Ensure that the bulk of the assessment assesses the most important goals.
- Where the goals relate to real life situations, include assessment that is as close to real life situations as possible.
- Assess significant or meaningful goals. Consider using progressive assessment of a larger task (such as an on-going group project) rather than a series of smaller, less meaningful tasks.

2. Make the assessment valid and reliable

- Consider using a variety of assessment methods. For example, individual assessment (eg. MCQ and short answer exams, essays, pracs), group assessment (eg. projects, PBL, debates), self- and peer-assessment (e.g. paper-swapping, seminar presentations).
- Include some formative assessment, such as briefer, more varied tasks (perhaps related to larger assessment tasks) that require little or no teacher marking or can utilise peer- and self-marking (e.g. Venn diagrams, cloze tests, 3-minute essays and concept maps).
- Avoid 'over-assessing'. Ensure that assessment tasks don't overlap too much in the goals they assess.

3. Make assessment criteria and standards explicit to students

- Use examples of varying work to illustrate standards. Provide several examples of each standard.
- Provide and explain assessment standards and marking criteria in class.
- Spell out assessment procedures and preparation required.
- Give students opportunity to conduct practice assessment/exams.
- Ensure language and analogies are suitable for everyone (given the large range of abilties and backgrounds in large classes).

4. Make assessment criteria and standards explicit to markers

- Give detailed and explicit information to markers, especially with regards to 'part-marks'.
- Ensure markers are aware that the standards must be the same across the entire course (not just their section). Consider providing a marking template &/or having tutors 'swap' essays to moderate standards.
- Optimise communication with and between the markers to maintain grading consistency.

5. Encourage higher level thinking

- Questions (especially multiple choice and short answer) should be designed to assess comprehension, application, analysis and synthesis, not only factual knowledge.
- Include some assessment exercises that require higher order thinking skills (such as synthesis, evaluation, reflection etc).
  For example:
  - ask students to justify answers on a selection of MCQ's;
  - ask students to generate several solutions to the one problem;
  - ask students to say why one solution to a problem is better than others;
  - use student portfolios or reflective journals;
  - give students a question (or style of question) they have never seen before.
- Consider allowing students some choice in the assessment tasks they conduct (if discipline permits). For example, give students a variety of possible essay topics allowing them to draw on their own prior knowledge or interests.

6. Make assessment part of the learning process

- Use assessment for learning rather than just grading.
- Conduct an assessment task early in the semester (eg. short piece of writing, short exam) when students have better access to resources (such as tutors) and more time for feedback to enhance their learning.
- Plan for formative assessment (practice tests, peer- and self-assessment, mid-semester assessment etc) that serves to provide feedback to students on their progress.
- When devising assessment, encourage transfer of learning across assessment situations. Eg. an exam question requiring knowledge gained from writing an essay or performing a practical task.

7. Provide feedback to students on their performance

- Use marking criteria to allow students to identify the difference between their own work and the 'ideal'.
- Consider giving generic feedback to the whole class (such as a summary of overall performance on assessment and common strengths/weaknesses) and detailed feedback only to those students who request it.
- Ensure that generic feedback is meaningful. For example, if the worst results were for Question 2 of a test, explain why and how they could improve.
- If using progressive or project-based assessment, have teachers/tutors closely monitor students early on to detect mistakes or misconceptions which might lead to difficulties or poor grades later.
- Include on-going tasks that utilise tutor and/or peer feedback such as submitting work in stages, set exercises, short in-class tests, weekly papers, etc.
- Consider placing practice problems (and solutions) on a course web-site.

8. Get students to conduct some of their own and others' assessment

- Provide opportunities for students to see models of good practice. Consider depositing work of successful past students on the web or in the library. Have students compare their work against these exemplars.
- Provide opportunities for students to exchange and assess each others' work using specified criteria and standards.
- Use a system of peer-assessment to evaluate some criteria or conduct some pre-marking (such as the structure of a report).
- Group projects reduce marking load and encourage collaborative learning, however consider a system for ensuring individual accountability or give individual grades.

9. Be strategic in your choice of assessment modes

- Develop assessment tasks which are realistically achievable (given resources and class size) but which still assess the important learning goals.
- Allocate more resources to the more important assessment exercises.
- Use time-saving assessment (such as MC tests) to assess basic knowledge and skills.
- Use more 'labour-intensive' assessment methods (research papers, essays etc.) for assessing higher order learning goals such as students' ability to compose, predict, synthesise, evaluate etc.
- Spread assessment exercises over the semester to build assessment into the learning (also see no. 6) and to reduce end of semester 'pile-up'.
- If using MCQ tests, use meaningful distractors to get students thinking about the answers.
- Consider using reflexive peer-, self- or group-assessment, with clear and transparent guidelines and criteria.
- Consider including some assessment (such as essay question or problem on an exam) which will only be read if a students' grade is borderline.
- If appropriate for assessment modes, investigate computer-based, automated or semi-automated assessment options (eg. Mindtrail).

10. Set up a system to control for quality.

- Discuss/devise marking scheme, criteria, mark distribution, etc. with all markers.
- Consider cross-marking and re-marking a selection of assignments/exams.
- Ensure ownership or responsibility so that the 'buck stops somewhere' (i.e. with the marker or course manager).
- Pay staff to attend meetings, read guidelines and conduct marking.

Administration and Management

1.Configuration of classes

Consider:

- Different organizational structures e.g. fewer lectures and more tutorials
- Seeking out appropriate venues for giving repeat lectures (to achieve smaller groups)
- Keeping tutorials and laboratory sessions to a manageable size (depending on available venues)
- Drawing on later-year students to act as mentors
- Peer-assisted learning schemes (such as Peer-Assisted Study Sessions), especially where tutorials have been abolished

- Team teaching or multiple lecturers (with a designated coordinator)
- Using group-learning and peer-assessment techniques (see also Planning and Teaching)
- Distributing international students throughout the classes
- Using alternative information dissemination techniques including online resources, online FAQ etc. (Also see no. 4)

2. Organising assessment and feedback procedures

Consider:

- Maximising your use of administrative/support staff by having them use/develop systematic procedures for dealing with recurrent tasks. E.g., standard forms, letters, spreadsheets, etc.
- Asking administrative staff to nominate tasks they enjoy and utilising their talents
- Employing or designating a student 'liaison officer' or part-time administrator to manage assessment submissions, inquiries, etc.
- Using a system for moderation across markers (eg. a marking template)
- Having tutors mark a "dummy" paper or exam to identify any problems or inconsistencies
- Paying markers and tutors to attend formal debrief sessions (if funds available)
- Leaving space and including a prompt on assessment marking sheets for students to indicate any particular area(s) they would like the marker to focus on
- Introducing on-line submission and tracking of assessment (eg. using WebCT) and semi-automated marking software (eg. Mindtrail) if appropriate
- Using a variety of assessment types. See Planning and Conducting Assessment

3. Staff development and coordination issues

Consider:

- Utilising available resources or academic time release to carry out some of the following:
  - Regular meetings with teaching staff to ensure comparability of teaching and marking
  - Meeting with all teaching staff to discuss activities (group projects, experiments, etc.) in detail before the start of semester
  - Informal surveys of staff (qualitative or quantitative) to identify training and other needs before regular meetings begin
  - Tutor training or in-servicing for new/ inexperienced small-group teaching staff
  - Devising (or revising) a tutorial guide for staff and students
  - Devising teaching manuals, handbooks, ideas packages or publications related to large-class teaching that can be made available to new teaching staff
  - Training for teachers unfamiliar with teaching and learning technologies and equipment
  - Setting up a database of sessional teaching applicants
  - Paying tutors to attend lectures (especially new tutors)
- Nominating a senior tutor to play the role of tutorial coordinator
- Making teaching publications available to new staff (eg., McKeachie's 'Teaching Tips')
- Also see Tutoring and Demonstrating and Sessional Teaching web-site

4. Using on-line support

Consider:

- The students' and tutors' access to technology before relying on it for teaching and learning purposes
- Using Web CT (or a similar package) to support delivery of course materials and facilitate the conduct of discussion groups
- Using 'hyper-linked' study notes to encourage independent revision and inquiry
- Having 'virtual' group work managed by a designated on-line tutor
- Purchasing software to assist with collecting, marking, and distributing assessment (if appropriate). Also see Planning and Conducting Assessment
- Providing training for teachers and students to use learning technologies and equipment

- Whether the online learning support complements the other teaching modes. (Are students even using it? Is it simply duplicating content?)
- Asking students to email tutors or to utilise Q&A on the bulletin board (to cut down on email inquiries direct to lecturer)
- Implementing a roster for tutors to handle online queries and e-mails

5. Coordinating and managing labs and pracs

Consider:

- Using outlines or manuals for labs and pracs
- Employing a student liaison officer for lab/prac administration and student inquiries
- Planning for students to work in groups on projects, pracs or in field-work to encourage peer learning and enhance interpersonal skills
- Using some form of group-, peer- or self-assessment system to reduce marking load
- Developing a system for ensuring accountability and recognition of individual efforts if using pairs or group work
- Running larger demonstrations of laboratory work (and including a related assessment task) where there is little or no opportunity for students to attend "hands-on" lab sessions
- Developing systematic procedures for dealing with recurrent tasks. E.g., standard forms, letters, spreadsheets
- Also see Tutoring and Demonstrating

6. Approaching senior administration to elicit support for large-class teachers

Consider:

- Inviting senior academics and/or Heads to teach a large class as a 'guest lecturer'
- Exposing senior academics and/or Heads to the issues at 'grass roots' by explaining and alerting them to the resourcing problems in large classes
- Getting involved with organisational decision-making structures such as School meetings and committees, Faculty meetings and committees, Teaching and Learning Committees or Education committees. Putting large class issues on the agenda may well influence the policy-setting behaviours of individuals at a later stage. See "Managing and Resourcing Large Classes" by Dr Linda Hort
- Negotiating (via Committees or with senior administration) strategies or incentives that give higher priority to large classes, challenge the perception that teaching large classes is a 'lower status' role and encourage active input from senior staff in large courses.
  For example:
  - A policy that all large courses must have a student liaison officer (or equivalent);
  - Employing sessional staff to lighten teaching loads (see also Sessional Teaching web-site);
  - TQA policies and procedures;
  - Re-distribution of some resources
- Networking with other large course convenors on teaching and learning issues (See also the various Dissemination Projects being conducted at other Australian universities to improve large class teaching)

Tutoring & Demonstrating Guidelines

Preparing tutors

As a tutor or demonstrator

1. Preparing yourself to be a tutor:

- Ask about the terms of your contract and what is expected of you including how you will be paid
- Ask about resources and facilities available to you as a tutor (eg. handbooks, information packs, web-sites, staff support, IT support etc.)
- Have an understanding of what learning is, and familiarise yourself with student-centred teaching techniques
- Have an understanding of 'students at risk', strategies for dealing with them and what services are available for these students
- Clarify your role and responsibilities with your supervisor
- Understand the course structure and organisation
- Review occupational health and safety and ethical guidelines
- Be aware of ethical guidelines for interacting with students and the university

DON'T....

- Assume you will be told about all the resources and support available to you
- Just rely on your knowledge of teaching from how you were taught

As a tutor coordinator

1. Preparing tutors to begin teaching:

- Identify clearly the tutors' roles and duties
- Communicate your expectations to the tutor/s
- Inform tutors how to get paid and conditions of employment
- Explain the course objectives, structure and organisation
- Discuss how tutorials should help students achieve course objectives
- Discuss strategies for dealing with 'students at risk' and any services are available for these students
- Consider developing an induction pack with necessary and useful resources (including handbooks, web-sites, etc.)
- Consider supporting tutors to attend professional development workshops on student-centred teaching and learning methods
- Ensure tutors are aware of occupational health and safety regulations and ethical guidelines
- Model behaviours and attributes to the tutor

Leading tutorial sessions and supporting tutors during semester

As a tutor or demonstrator

2. When leading tutorial/lab sessions:

- Know your goals for each class and communicate these to students
- Clarify your expectations with the class
- Create a welcoming and engaging learning environment with opportunities for student interaction
- Be enthusiastic - you are critical to students' learning
- Learn students' names (consider name tags, names on desks, getting to know you exercises)
- Alert students to your availability for consultation
- Ensure you are familiar with the content, concepts, facilities and equipment for each session
- Rehearse tasks, exercises, presentations, experiments, etc. before the start of sessions
- Listen, question and respond with additional examples and succinct explanations
- When appropriate, provide clear demonstrations and check for students' understanding
- Monitor safety
- Keep the tutorial on track and reach clear outcomes

DON'T....

- Dominate the tutorial/laboratory
- Simply repeat the lecture content
- Think students will know as much as you do
- Get involved in arguments

As a tutor coordinator

2. Supporting tutors during semester:

- Alert tutors to your availability and maintain regular contact
- Encourage tutors to be enthusiastic
- Regularly revisit the purpose and goals of the tutorials/labs with the tutors
- Consider paying tutors to attend lectures, especially if they lack an understanding of the materials that students will be required to know
- Provide tutors with ideas about ways to improve their facilitative skills and create an engaging environment with opportunities for student interaction
- Provide opportunities for tutors to rehearse tasks (e.g. experiments) before the start of sessions

Assessment

As a tutor or demonstrator

3. When assessing

- Be sure you use criteria and standards that are congruent with those established by the lecturer in charge of the course
- Check your understanding of the criteria and standards for marking, especially with regards to giving 'part-marks'
- Explain the assessment criteria and standards to your students
- Check your school's policy on plagiarism and explain it to students
- Be vigilant about cheating and copying
- Provide meaningful, timely feedback
- When marking, make consistent judgements across students and groups
- Have students use marking criteria to identify the difference between their own work and the 'ideal'
- Consider giving generic feedback to the whole class (such as a summary of overall performance on assessment and common strengths/weaknesses)
- Ensure that generic feedback is meaningful. For example, if the worst results were for Question 2 of a test, explain why and how they could improve
- Include on-going tasks that utilise tutor and/or peer feedback such as set exercises, short in-class tests, weekly papers, etc
- Be sincere and positive with students about their results

As a tutor coordinator

3. When using tutors for assessing:

- Clearly explain the criteria and standards for marking
- Alert tutors to your University's policy on plagiarism and ensure tutors are vigilant about copying and cheating
- Have tutors discuss marking criteria with students and demonstrate their use in identifying the difference between their own work and the 'ideal'
- Consider asking tutors to include on-going tasks that utilise tutor and/or peer feedback such as set exercises, short in-class tests, weekly papers, etc
- Encourage tutors to be sincere and positive with students about their results

Evaluating performance

As a tutor or demonstrator

4. Evaluating your performance:

- Reflect on your own practice (consider making your own notes to refer back to, or keeping a tutorial journal)
- Video tutorials to watch your own teaching
- Seek feedback from peers and supervisors (e.g. ask a peer/colleague to sit in and observe a class)
- Seek feedback from students (eg. student evaluations)

As a tutor coordinator

4. Evaluating tutors' performance:

- Suggest to tutors that they make a video of their own teaching to replay and review critically after class
- Consider organising peer feedback for tutors
- Encourage tutors to seek feedback from students (eg. student evaluations)

As a member or manager of a teaching team

As a tutor or demonstrator

5. As a member of the teaching team:

- Communicate actively with other members of the team so you have an informed basis on which to discharge your duties
- Discuss the possibility of attending lectures with your school (ie. Will they pay you for this? Is it a requirement?) especially if you lack an understanding of the materials that students will be required to know and the tasks they will be required to undertake
- Book regular meeting times with the course lecturers and other tutors

As a tutor coordinator

5. As a manager of a teaching team:

- Encourage tutors to communicate actively with their peers and other members of their team so they have an informed basis on which to discharge their duties
- Investigate the possibility of paying tutors to attend lectures especially if tutors lack an understanding of the materials that students will be required to know
- Book regular meeting times with the tutors