

Inclusive Practice in Tutorials and Practicals for a Diverse Student Body within Computing

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The intended learning outcomes of the workshop:

That you will:

- understand some principles of how students learn in higher education;
- learn skills you can use in tutorials and practicals to help you:
 - participate fully as a facilitator of student learning;
 - encourage student preparation and participation,
 - support and value student contributions,
 - support a diverse student body, including your International students,
- understand the importance of the role of tutorials and practicals in enhancing student learning; and
- be motivated to be professional in your approach to teaching.

Think about a learning environment you have been involved in, either as a student or a teacher, what kinds of diversity were you aware of in the student body?

→ Make a list. Compare your list with that of the person next to you.

Inclusivity applies when.....

"...participation and success are irrespective of 'race', gender, socio-economic status, ethnicity, age and disability so that disadvantage is not reproduced"

(Nunan, George & McClusland, 2000)

Students new to the Australian Tertiary Teaching Scene

Old game—new rules

Imagine the following scenario. Some new friends ask you to play a game of cards with them—one you've played since you were a child. It's a game you're very good at and you've always won this game in the past. You're one of the best and everyone in your family and all your friends know it! However, unbeknown to you, your new friends play by different rules and there are heavy penalties for those who don't play by their rules. No one tells you this when you start to play though, so you play by the rules you know. You lose a few rounds because it takes you a while to realise that the rules have changed. In the meantime, you've been penalised quite heavily. In fact, you've lost a lot of money and you've begun to doubt that you'll ever be able to win at this game again. However, you're very determined so you start to try to work out what the new rules are. That's really hard because they're not written down anywhere and everyone is really busy playing the game. No-one has time to stop and tell you the rules. They all assume everyone knows them! Finally you do work them out though. Now the only problem is that remembering to play by these new rules is really hard because you've played this familiar game by your rules for as long as you can remember. Sometimes you forget that the rules have changed. You find that you need constant reminders, or you slip back into old habits and start playing by the old rules. You also find that you don't have some of the skills that the new game rules require and it takes you longer to complete the required plays. People get impatient with you. You get frustrated. You never *really* get used to the new rules.

from UniSA Learning Connection Guide: <http://www.unisanet.unisa.edu.au/learningconnection/staff/svcs/tchnqdes.asp> (cited 01/03/04)

Diversity in your classes

The previous situation is not only faced by our international students, it applies to many students who have not had much experience learning at university.

The extent of diversity within our classes is not always immediately obvious. Apart from the more obvious indicators of diversity:

- racial and cultural background;
- language(s) background;

Students also come with a diversity of:

- range of previous educational experiences / pathways into University;
- range of previous experiences and therefore expectations of teaching and learning environments;
- contacts with the Australian educational system / philosophies;
- life, work and country experiences;
- age, gender, (dis)abilities, socio-economic background;
- motivation and interest in studying; and
- existing skills for learning.

Such diversity brings its challenges and benefits in any teaching and learning situation.

What do we want our students to do

The Constructivist Framework for Learning argues that:

- knowledge resides in individuals;
- the learner makes sense of what is taught by trying to fit it with his/her previous experiences and understandings;
- knowledge “construction” happens through:
 - experiencing things,
 - talking about and reflecting on those experiences,
 - perhaps changing what we accept as true, or discarding the new information as irrelevant.
- Learning is therefore a social process.

Students Learn Best when....

- they are active: e.g. problem solving, researching;
- they interact with others - peers and teachers;
- they are motivated and interested in the subject;
- they have a sound foundation in learning the knowledge of the discipline; and
- they understand how they learn - when they are reflective learners.

Whenever possible, we should try to ensure this happens in our tutorials. However, much of what we want our International students to do in our tutorials is an Old Game with New Rules. Not only are the rules different but also in undertaking a course of study in another country, such students may experience difficulties with:

- Social-cultural adjustment:
 - The experience is isolating;
 - They may undergo ‘culture shock’.
- Language:
 - The Australian accent is strong;
 - Style of speech is different to what was taught ‘back home’:
 - We speak much faster;
 - We use different turns of phrase.
- Educational expectations
 - Many of our international students were ‘good’ students in their home country as defined by....?
 - Their experience of our ‘style’ of teaching and learning outcomes may be limited.

Our own practice must aim to help them successfully make whatever adjustments they need in order to access a quality education here at MU. Such students have a lot to offer us as their teachers, and their fellow learners once they have become accustomed to learning here.

Look for what students in your class *can do*, *not what they can't do* – don't be a deficit teacher!

If students require assistance, speak with your lecturer-in-charge, and refer them to support *as soon as possible* (counselling services, writing skills, ‘English for Academic Purposes’)

Clash of Educational Expectations: Use as a Guide Only, not as Facts to be Applied to Every International Student!!

from: *Bridging the Intercultural Communication Gap* Mezger, J. (1992) as cited in <http://www.latrobe.edu.au/assets/learneroutcomes.doc> (cited 01/03/04)

Teaching style		Role of teacher		Learning style		Role of learner		Assessment	
Other	West	Other	West	Other	West	Other	West	Other	West
lecture	lecture tutorial discuss groups projects	respected authority view is accepted as correct	students expected to compare a range of views	reproductive/rote is dominant	analytical and speculative	passive dependent	active independent take responsibility for own learning	end of year exams	on-going
teacher provides all info. and uses 1 main text	expects student to use other sources	teacher authority and knowledge unchallenged	are to be challenged	passively receive knowledge	critically receive knowledge	not challenge or question teacher	acceptable to query the teacher	exams only or main form	exams only one form
limited equipment	A.V. etc	pastoral care role	not so	memorise and imitate	select key concepts and details	less inclined to seek help	seeks help and asks for clarification	exams mainly multiple choice few short answer	essays problem solving
closely supervise student work	expect student to be independent.	exclusive source and transmitter of knowledge	facilitator of knowledge.	summarise, describe identify	questioning judging recombining ideas and info. into an argument	listener in class and given written notes	listen and take own notes	test memory recall	analyse solve problems argue
aim is often simple transfer on knowledge	aim to enhance independence. critical speculative	transmits information sometimes imparts moral and social training	analyses information and ideas and models critical approach	ask what	ask why how how valid how important	speak quietly and avoid disharmony	speak so all can hear and engage in debate and argument	info. comes only from teacher	many sources
				correctness	simple originality reshaping of material	eye contact often seen as disrespectful	eye contact important part of communication	exam technique not important	is important to organise and understand the question identify key words be relevant
				usually read 1 text deeply	read widely be selective			class attendance and knowing facts usually means success	not so
				circular patterns of thinking and reasoning	logical linear patterns of thinking			use of others words without referencing	rejection of plagiarism

Inclusive and Effective Teaching Strategies

What we do in tutorials and Practicals depends upon the aims and outcomes of the unit itself, and each individual session. Learning activities should relate to these goals and outcomes.

In your unit groups, discuss the following questions:

- What are you *trying to achieve* in your tutorials and practical classes:
ie what are the learning outcomes of the unit, and each of these sessions?
- What strategies have you used, or have experienced yourself as a student, that ensure an effective and inclusive learning environment?

Down to the Pragmatics.....Managing the learning environment

1. Facilitating a Tutorial

Before each formal teaching session:

Student Learning	Ask yourself: <ul style="list-style-type: none">➤ How will students benefit from this session?➤ How are you going to ensure that they learn during and after the session?➤ How are you going to monitor their learning?➤ How will you encourage them to take a deep approach to their learning?
Materials	<ul style="list-style-type: none">➤ Check notes for completeness:➤ Anticipate when and how audio-visual resources are used;➤ Which segments are necessary parts of your input and student activity, which ones could be deleted if time runs out; which ones are additional examples, and/or illustrations needed for clarification.
Rehearsal	Before each class: <ul style="list-style-type: none">➤ Think through what you are going to say.➤ Allow adequate time for student activities and for debriefing them afterwards.➤ Have you allowed time for questions, clarifications, extra examples?
Opening	<ul style="list-style-type: none">➤ Are your opening sentences interesting, exciting?➤ Will they gain students' attention immediately?
Room	<ul style="list-style-type: none">➤ Allow yourself time to get to the room so that you can check (when necessary and possible) lights, furniture arrangements, OHP, microphone and any other resources you are using. <p>Think about the room that you do most of your tutoring in:</p> <ul style="list-style-type: none">➤ What does the physical space say about expectations for learning?➤ What can you do about it?

2. The First Tutorial: PLAN WELL, the FIRST ONE is IMPORTANT

- *Make the Introductions:* yourself to them; them to you; them to each other.
- *Use Icebreakers* to encourage all students to feel comfortable and get to know the rest of the group.
- *Learn as many of their names* as you can, and make sure they know yours!
- *Clarify your expectations:* ground rules e.g. questions are encouraged; work expectations and requirements.

From the start, make small groups *smaller*. The most important reason for organising tutorial groups to work in smaller subsets is so that each student is actively engaged on the task at the same time. The role of the tutor is *not to answer questions*, but to create an environment where students can both ask, and answer. Students will often try to get tutors to answer the tutorial problems rather than grapple with the ideas themselves. Often tutors can shift students away from this attitude by careful questioning responses (see appendix 2).

3. Ice breakers

- **Pair up for introductions**

Ask the students to spend the first ten minutes of the tutorial finding out about the person beside you. Using this information the students introduce the other person to the whole group *or* a more structured activity is to ask students to pair up and to interview each other for about 3 to 4 minutes and then swap. Suggest that they take notes. Each student introduces their partner to the group.

Students can find this process less intimidating than introducing themselves (from: http://72.14.207.104/search?q=cache:w18Ln3wXT-gJ:www.utas.edu.au/itr/videoconf/the_first_tute.pdf+tutorial+icebreakers&hl=en&gl=au&ct=clnk&cd=4 cited 20/2/06).

- **Count me in**

Two people start this exercise with more people gradually joining in. The first pair find something quite specific they have in common and announce it to the rest of the tutorial. Others with this common factor join the group. This larger group then has to find something else to attract more people to the group. The activity continues until everyone has determined a common interest. (from Newby, 1993 *Confronting the Silent Seminar*) <http://www.itl.usyd.edu.au/Tutoring/study/starting/names.htm#icebreakers> cited 20/2/06).

- **Wallet-exercise (20 mins)**

Divide the class into small mall groups of 4-5. Each person takes it in turn to show the group his/her wallet/purse and to show/explain a couple of his/her favourite contents and why he/she carries these items <http://www.wilderdom.com/305/tutorials/01-Introduction.html> cited 20/2/06).

4. Time Management.

Part of running a successful tutorial is making certain that the students leave having *learned* something. Often the requirement to 'finish' activities and problems, the short time available, and the fluid nature of discussion, can contribute to a largely 'unfinished' tutorial. Use you time well:

1. Plan Ahead! Allow a few minutes for settling down and informal conversations with the students.
2. Look at the requirements for the tutorial and decide how which questions contain the ideas most important to the current lecture series. Plan activities/discussions that support the question. If you have a series of questions that you feel you 'must' cover ask the group to vote for the '3' most important to look at.
3. Generally allow about 5-10 mins working time individually or in small groups, then bring the problem/discussion to the whole group. Use your own experience and knowledge to pass the issues back to the class, or take the opportunity to demonstrate something important. If you demonstrate something it is critical to ask the students to do it again (or in a different format) in the next part of the tutorial.
4. ALWAYS leave 5 minutes at the end to clarify the main issues covered in the tutorial. Let the students know what they have gained by being in the room.
5. Record the effectiveness of your tutoring, and the quality of learning, after each tutorial. If you come away with some questions about the content/class make sure you feed this information back to the lecturer in charge.

Some Best Practice Guidelines

In our dealings with students we are able to provide an inclusive environment for our International students, based on best educational practice, which benefits all our students (Biggs, 1997):

Communication of Content

- Know who your students are so that you are aware of any specific issues, cultural or otherwise, in order to avoid miscommunication or offence;
- Make your course assumptions explicit eg: if the course content is closely related to a particular textbook/set of readings, make this clear to students;
- Speak clearly and always face the students when speaking;
- Use culturally inclusive/sensitive language;
- Avoid colloquialisms, abbreviations and long convoluted sentences;
- Use outlines and simple overheads to outline your tutorial at the beginning of the class and put it back up so students can find their place;
- Provide outlines for how notes might be taken (perhaps just in the first 2-3 weeks);
 - Support written notes with diagrams wherever possible
- Show/explain the crucial vocabulary for the sessions – especially the technical jargon;
- Ensure students can link the classes
 - comment on where this class leads on from the last one,
 - end each class with a summary and a note on the next class.

Communication of Expectations

- Explain/publish the modes of delivery and their purpose i.e. Lectures, labs, tutorials etc. and thus what is expected of the students in each of these environments;
- Publish the times at which you will be available for consultations and stick to them!
- Make your expectations of learning explicit from the outset:
 - class norms for your class,
 - go through this in the first session and reinforce in future sessions;
- Be explicit about the amount of time students are expected to work on their own outside formal classes;
- Be specific about the use of texts:
 - What sort of texts are appropriate and which one should they use?
 - Whether online materials can be used or do they have to do some library research?
- Identify the key concepts for students;
- Differentiate for the students the place of rote learning and analytical thinking in your discipline and this unit;
- Emphasise the role of problem-solving in their learning (students are often very confused about the term “critical”):
 - Comment on your own critical thinking strategies eg what questions does the reading raise for you? What other sources might you consult to test the validity of the claims?
- Be clear about what you want the students to do – summarise, identify, or argue;
- Provide written support for all learning tasks and assignments:
 - In oral presentations, let the skilled confident students present first modelling good practice,
 - ‘Model’ answers which highlight good practice,
 - explain the difference between ‘quoting experts’ and ‘plagiarism’,
 - how you expect students to think and behave in the discipline and your class;

Maximising student activity

Be sensitive to cultural norms of the roles of teacher and student

- At the beginning of semester take time to create a supportive and interactive class by:
 - Getting students to introduce themselves:
 - not in a large group, but perhaps initially asking students to move around on a 1-1 basis or in small groups,
 - Establishing clear guidelines for use of names and their pronunciation,
 - Putting students' names on the whiteboard so everyone can access them and thus use people's names in the class,
- Specifically encourage ALL students to actively engage in discussion by:
 - Setting up activities which require students to share experiences and knowledge with each other to successfully complete the task,
 - Making sure activities encourage, support and reward appropriate participation,
 - Taking advantage of the diversity of experience and interest of your student body;
- When using groups in the class:
 - think about the different constructions - self selected or teacher directed?
 - Encourage the group to agree on appropriate guidelines for interaction,

Asking questions:

- Provide students with structured ways of asking questions and following up problems encountered in lectures or private study,

Getting cross-cultural perspective:

- Specifically invite students to add comments based on their own cultural background,
- Establish cross-cultural groups for specific activities which require the different sub-groups to help each other to see a problem or issue from a different cultural perspective

Participating in small group discussion:

- Help International and NESB (non-English speaking background) prepare for small group discussion
 - Model effective and efficient reading strategies
 - Publish reading lists which indicate clearly what is *essential* reading and what is *optional* or *extension* reading related to specific tutorials,
 - Establish clear purposes for reading;
 - Establish sub-groups of learning partners of the same ethnicity who are given specific permission to talk in whatever language they like, even though their final presentation to the group will be in English;

Assessment

- Make clear to students the links between outcomes, content and the assessment tasks;
- Share with students the criteria for assessment tasks and provide early and frequent feedback;
- Make sure students are aware of the discipline's guide for referencing, and how this translates into reality;
- Go through the assessment tasks, deconstructing what it requires the student to do;
- In consultation with the lecturer-in-charge, set a short introductory task to assess English language competence;
- If it is Departmental / unit policy, consider giving students the opportunity to resubmit an early task so they can take up and learn from your feedback.

International Student Facts or Fallacies

1. *They rote learn and lack critical thinking skills*

- rote learning – the exercise of memory without proper understanding of the matter in question (surface approach);
- used to describe students from Confucian heritage cultures [CHC] (China, Korea, Japan, HK and Singapore;
- CHC students engage in repetitive activity and memorisation, but not as an end in itself, rather as a ‘route to understanding’; used to reduce complexity or to ensure recall;

2. *They are passive, they won’t talk in class*

- ‘inside / outside’ rules for CHC students – determine when it is proper to talk (noisy in the café; demure and shy in the classroom);
- ‘inside’ = appropriate and ‘outside’ = inappropriate: normally talk inside the class is ‘outside’, whilst outside the class, talk, even academic talk, is ‘inside’;
- if your language ability is limited, making you self-conscious, it would probably be ‘outside’ to talk inside the classroom;

3. *Progressive Western teaching methods won’t work with Asians*

- several HK universities used Problem based learning, and it works as well as it does anywhere else;
- encouraging learning partners, and learning in groups provide culturally acceptable ways for CHC students to learn.....it all depends on how it is set up and assessed;
- learning in context.....the teacher’s task is to make clear what is required for the immediate context; ensuring aligned teaching *ie* the teaching and learning activities encourage students to engage in the cognitive processes most likely to achieve the learning objectives, backed up by assessment tasks!

4. *They appear to focus excessively on the method of assessment*

- what ambitious student doesn’t?; assessment is the ‘tail that wags the dog’;

5. *They don’t understand what plagiarism means*

- do Western students? Up to 90% of all students plagiarise in some universities (Walker, 1998; cited in Biggs, 1999);
- in some international cultures where it is disrespectful to alter the words of an expert, the issue of plagiarism is more complex (Ballard and Clancy, 1997; cited in Biggs, 1999);
- lack of rhetorical confidence can lead to plagiarism;
- the rules of citation must be made crystal clear to all, not just international students;

6. *They stick together....won’t mix with local students*

- this is often true, both socially and educationally;
- in mixed groups (international and native speakers), intercultural learning occurs – stereotypes are challenged and attitudes change positively, yet both locals and internationals prefer like-with-like tutorial groupings, which may well assist with content learning;
- what is our responsibility as a teacher.....?

7. *They do not easily adjust to local conditions*

- CHC students are very adaptable, they are good at spotting cues and picking up coping strategies;
- Singaporean students studying in Australia changed in one year from strategies that were adaptive in Singapore, to those that were adaptive in Australia (Volet & Renshaw, 1996; cited in Biggs, 1999) *ie*: ‘always aim to get the correct answer’ and ‘learn lecture material

by heart' replaced after a year in Australia by 'evaluate different ideas and give own opinion';

8. They tend to look on lecturers as close to gods

- authority relations are different in Western and non-Western societies: Westerners tend to play down the authority they have, where Asian teachers make their authority clear;

Some characteristics make teaching CHC students easier, rather than more difficult.....

- success is attributed to effort and failure to lack of effort, whereas Westerners believe success requires ability more than effort and attribute failure to lack of ability; CHC attitude is optimistic..... 'if I fail I can do something about it'!
- motivation is complex and stronger than for Western students; pressures to succeed are collectivist (familiar, peer) as well as personal.

References:

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