

Using *e*VALUate to improve student learning

2. Creating engaging learning experiences

The second item in eVALUate asks students their level of agreement with this statement:

The learning experiences in this unit help me to achieve the learning outcomes.

The learning experiences could include: face-to-face lectures, tutorials, laboratories, clinical practicums, fieldwork, directed learning tasks, and online and distance education experiences.

This document aims to assist teachers to create face-to-face and virtual experiences which assist students to learn.

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1. What are learning outcomes and why are they so important?

Unit learning outcomes are what students are expected to know, understand or be able to do in order to be successful in a unit. Unit learning outcomes begin with an action verb and describe something observable and measurable. Learning outcomes are the most important section of your unit outline. They

- clearly communicate the type and depth of learning students are expected to achieve;
- provide a benchmark for prior learning assessment;
- clearly communicate graduates' skills to prospective employers; and
- indicate to the students how they might organise their learning programme.

2. Keys to successful learning

a. The aligned curriculum One of the keys to successful learning is the **aligned curriculum** (Biggs, 2003): this means that learning outcomes are clear, learning experiences are designed to assist student achievement of those outcomes, and carefully designed assessment tasks allow students to demonstrate achievement of those outcomes. This concept is illustrated in Figure 1:

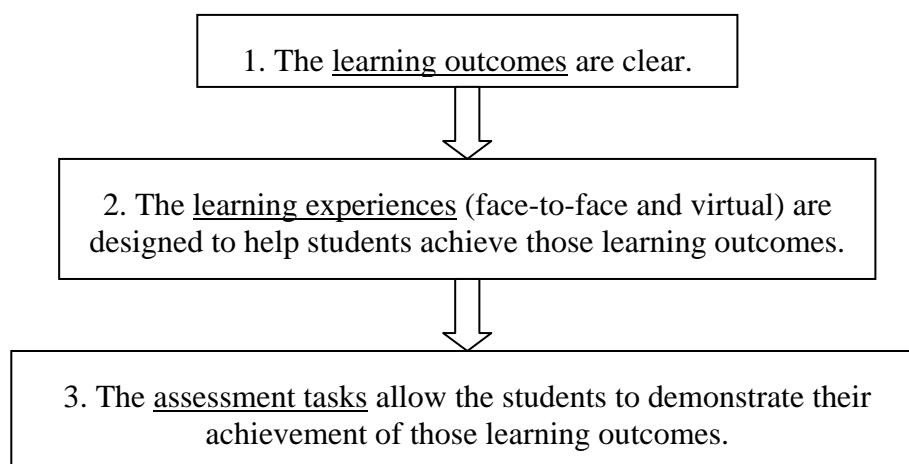


Figure 1. The aligned curriculum

b. Student engagement Traditional university teaching and learning is transmissive: it focuses on communicating a great deal of information (or 'content') to students. Today's students, with very different characteristics from much earlier cohorts, do not usually learn as effectively by simply listening passively, note-taking and absorbing information. They learn better if they are engaged. This means moving away from didactic content delivery and increasing interaction (Mentkowski, 2000; Ramsden, 1992).

Two-way interaction with teachers, peers and sometimes electronic tools means that learning becomes a dialogue: the nature of university learning is that a concept is presented by the teacher, the student responds, the teacher clarifies, the student seeks further clarification again, and so on, until complex intellectual concepts are clear (Laurillard, 2002). This can of course involve multiple teachers and students in various roles. Quality interaction is likely to lead to more, and more effective, learning:

- Students learn 10% of what they read,
- 20% of what they hear,
- 30% of what they see,

- 50% of what they see and hear,
- 70% of what is discussed with others,
- 80% of what they experience personally, and
- 95% of what they teach to someone else (Glasser, 1990).

This discursive process is best suited to small and manageable groups, and the reality is that most classes are large, and may take place in a lecture theatre. This makes close interaction more difficult, but not impossible. The remainder of this document aims to suggest strategies for increasing engagement in the most common teaching and learning modes in universities. It must not be assumed, however, that the more interaction the better: the overuse or misuse of interactive strategies can lead to boredom, overload, frustration and the feeling that the learning activity is just ‘busywork’ (Northrup, 2002).

3. Engaging students in lectures and large classes

3.1 What you’re up against

Students’ attention span at oral presentations

Very few of us attend regular lectures these days: most information comes to use electronically, and includes graphics, colour, and film footage (the television news, for example). Your students are unlikely to be accustomed to sitting for long periods simply listening to someone talk.

Students’ expectations

Some students expect to come to lectures and be able to simply listen, and to hear ‘answers’: this may help them to learn, but chances are they will learn more effectively if they are expected to do something with what they hear or see.

Entertainment value

The lecture format and venue suggests you are the ‘sage on the stage’, and that you are likely to inform or entertain. While there is nothing wrong with an entertaining lecture or class (as long as appropriate learning is the outcome), you may find that students have an expectation that the lecture should have ‘entertainment value’.

Noise’

In communication theory, ‘noise’ is anything physical, psychological or semantic that can interfere with the communications process (Fiske, 1990). It’s a similar thing for learning: we have difficulty learning when we are tired, hungry, anxious, distracted or cannot see or hear well. These things (as well as a sense of distance) can all interfere with the learning that could take place in a lecture or large class.

Disruptive behaviour

Large classes can be havens for disruptive students. Avoid letting them take control of the learning space by; inviting them to re-focus on their learning, asking them questions related to the lecture, breaking the large group into pairs for short sessions, challenging them to continue their socialising elsewhere. Also, because you are in a large space, it can be wise to move around if you can—make sure you can be heard. You should also consider strategies for avoiding disruption—don’t ask 500 students to start moving around the lecture theatre, or distribute papers, for example. Plan your lecture so that there will be as little chaos as possible—and have a device for calling them back to attention (a bell, music, change of light).

3.2 Strategies for engaging students in lectures and large classes

- Ask students to reflect in silence for a few moments in order to think, formulate a question, make a suggestion, or record their thoughts on a topic which has just been presented.
- Ask students to share a task in pairs or in small groups (without moving seats, if that is going to cause chaos).
- Call on individuals to contribute answers—for example, by using colours (Right, I'm going to ask anyone who is wearing a red top!), or by naming students, if you can.
- Have students recall what they learnt last week: ask them to tell you, or better still, how they witnessed some application of last week's learning in their lives—on the news, at home or work, if appropriate.
- Have students test themselves on their prior knowledge of today's lecture—put up an overhead, and have them work silently for 3-5 minutes on a task associated with the learning outcome of the lecture—let them self-assess, or share what they think is the solution with their neighbour.

3.3 Other tips for teaching large classes

If you use the lecture predominantly to **transmit information**, you might want to consider using it for other purposes. There are more effective ways of transmitting information such as:

- Provide students with a summary of your lecture (they can use it to add notes, thoughts and questions to during the lecture);
- Provide that summary a week earlier and let them know that the lecture time will be used to solve problems, apply the knowledge to case studies or to discuss issues based on that information;
- Make sure you provide a structure so that students know what is coming in the class—what are the learning outcomes of the class, and how it will be conducted.
- Make yourself as visible and audible as you can—be aware that some of your students will not be accustomed to your accent—so slow down, and project your voice to the back row. Your voice will project better if, when you speak louder, you lower the pitch (frequency). If you are using a microphone, make sure it works well.
- Vary your tone and volume—it keeps your audience interested.
- Seeing a lecturer pace up and down across the 'stage' (or performing some other unconscious behaviour) is often annoying (it creates 'noise'). Ask a colleague to observe your lecture and let you know if you have any 'noisy' behaviours.
- It can also be helpful to move around the theatre—up the sides, up the back, and so on.
- Be clear about what you want to say, and how you wish students to engage. Speak clearly and deliberately.
- Use visual aids judiciously—they can certainly help students to focus. Do not display overhead transparencies or slides which are crammed with text.
- If you need students to read a whole paragraph, provide it in their lecture summary, or have a good reader read it aloud (and invite students to close their eyes so they can concentrate).
- Never hand write copious notes on a white board or overhead transparency, and have students spend the lecture copying them out. Photocopiers and websites do this far more effectively.

4. Engaging students online

4.1 What you're up against

Access to reliable technology

Consider your students' access to computing facilities, and to high speed Internet. While the vast majority of Curtin students have good access, there are still many students who may not have good access off-campus.

Computer and internet literacy

Again, students' abilities are improving as Internet-related activities increase in every day life in Western cultures. However, some students will need assistance and consideration in these matters.

Too much text onscreen

On the other hand, many highly computer-oriented students may find electronic learning resources tedious if they are static, and heavy on text and light on graphics.

4.2 Strategies for engaging students online

You can use a learning management system such as WebCT or Blackboard to:

- Manage your class: organise class lists, track students' access to materials and assignment submissions, and allow students to track their own progress
- Deliver information: The online environment can be used to publish handouts, lecture notes and course information. This can be helpful for remote or absent learners, or enable local students to access materials before or after face-to-face classes. Note that simply placing 'notes' online does not make those materials interactive—it simply delivers them to the students using a different form than paper.
- Engage learners: Online technologies can require learner participation through interactivity (in simulations, quizzes and assessment items, for example). You can also use the online environment to put students in contact with each other and with their teachers.

Emerging technologies for engaging learners

Early Web tools led us to focus on giving students access to information (we put slideshows and lecture notes online, for example). Later, learning management systems made it easier to get students 'doing' - interacting with resources in quizzes and with peers through chat and discussion forums. Now new Web tools are emerging: 'social software applications' are the result of people's desire to communicate. Recent publications suggest younger adult learners belong to the 'net generation' and they crave connectivity - they are less taken with passive media (such as television), and they are spending more time interacting with peers through instant messaging systems on the Web and SMS on their mobiles (Oblinger and Oblinger 2005).

These 'social software' tools are being used increasingly by educators to enable a greater level of community, interaction and collaboration among students, staff and colleagues. A recent edition of **LEARNING Matters** focuses on some of these technologies—some new (such as blogs, wikis and VoIP) and some not so new (such as instant messaging)—and how they might assist more engaged student learning. http://lsn.curtin.edu.au/LEARNING_matters/05october/new.html

5. For further assistance

Teaching development staff are available for help with individuals or teams.

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Resources to help you

A range of resources to help you to develop strategies to improve items which have been identified as needing improvement, are available from the eVALUate website, or alternatively a hard copy can be forwarded to you by Terri Crowe (x2305 or T.Crowe@curtin.edu.au). Resources are available for each of the following items of the eVALUate questionnaire.

1. **Communicating clear learning outcomes**
2. **Creating engaging learning experiences**
3. **Creating effective learning resources**
4. **Assessing student achievement of learning outcomes**
5. **Providing feedback for student learning**
6. **Improving student perceptions of workload**
7. **Improving student perceptions of teaching quality**

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