# SEBE Good Practice Guide for Cloud Learning

**STARTING POINT** The aim of this guide is to provide an introduction to designing and facilitating learning to enhance the educational experience for our Cloud students, who are fully online, while recognising that in some cases cloud or blended environments may feature as part of a located unit.

This guide is not intended as a 'how to' guide to use the *CloudDeakin* tools and there are plenty of technical resources at your disposal. Our intention is to provide you with a broader framework to support your thinking and decision-making processes in relation to teaching where technology is concerned.

The *SEBE Good Practice Guide* brings together the outcomes of research with examples of current practice. To reflect the different starting points and different needs of readers, the guide is divided into five distinct but interrelated sections.

1. **Preparing for practice** – sets the context of practice for Cloud and blended students at Deakin, and offers a few words about the role of technology in teaching

2. **Designing for learning** – introduces you to a five step model to create significant Cloud learning experiences

3. **Engaging learners** – shares the top 8 principles of engaging learners in the Cloud. **If you only read one part of the guide, THIS IS IT.**

4. **Technology in practice** – identifies potential Cloud tools that assist in the managing of key learning experiences

5. **Getting help** – links you to key people and directs you to further references.

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# 1. Preparing for practice

When asked to identify those elements critical to a positive learning experience Cloud learning students consistently identify three themes: the need to connect with their teaching staff and other students; clear and consistent communication; and a sense that the teaching staff care about their learning and the progress that they are making. Such findings are surprisingly similar to the kinds of feedback that located students provide. However, how you manage those expectations in a wholly virtual context is different. For example how do you show students that you care, that you empathise? How do you maintain a presence in the Cloud without succumbing to being on call 24/7?

Technology, at its best, extends the potential for learning. However, the effectiveness of technology, as with all instructional tools and approaches, needs to grow out of sound learning design and resonate with an evidence base about how our students' learn. Introducing technology might appear at first to be a matter of applying a new tool to an old task. If, however, a screen mediates the only connection we have to our students, we need to attend to a number of critical issues.

Some of the many that require consideration include: ensuring access to and familiarity with the technology; establishing guidelines and procedures that help students [and you] navigate the learning experience; maximising participation and 'buy-in' from students; promoting collaborative learning and creating learning processes that enable students to reflect on their learning process.

In this guide we advocate a technology-enhanced, student-centred learning environment based on the work of Hannafin & Land (1997), an approach that is grounded in constructivist learning theory. Put simply, we suggest that conceptual understanding is primarily developed through activity where the learner actively constructs their own understanding of concepts and their inter-relationships (Glasner, 1990). Biggs (2003) suggests that the most effective learners make learning an active and engaging process, to develop a rich pattern of meaningful associations. Educational technologies can promote and enable active learning with ready access to information and a range of interactive tools.

> **Teaching in the cyberspace classroom requires that we move beyond old models of pedagogy into new practices that are more facilitative. Teaching in cyberspace involves much more than simply taking old models of pedagogy and transferring them to a different medium. Unlike face-to-face classroom, in online distance education, attention needs to be paid to the development of a sense of community within the group of participants in order for the learning process to be successful. (Palloff & Pratt, 2001)**

> …putting pedagogy first, technology second (Draper & Brown, 2004:93)

**Top 5 student complaints**
1. Lack of communication and responsiveness
2. Unclear or implicit expectations
3. Lack of feedback
4. Basic information doesn't seem to be there
5. Links that don't work

Deakin Faculty of Science and Technology Off-campus Student Focus Groups, 2009.

# 2. Designing for learning

Executing a thoughtful learning design is critical to creating an engaging learning experience. This is as true in online teaching as it is in F2F. The difference is that in the former you need to consider how the technology will mediate the learning experiences you have in mind, and often that requires you to be far more explicit in articulating the actual learning process. Here we introduce you to a 5-step integrated model of unit design for significant learning experiences, based on the work by Dee Fink and associates, (2003) but modified here to compliment the *CloudDeakin* learning environment.

> **❝ Why do learning design tools matter?**
> Teaching with technology, by its very nature, requires preparation in advance, so introducing technology into learning and teaching requires you to make explicit many of your tacit practices, and as a result, often makes people come to question more deeply what they are trying to achieve and why... **❞**
>
> Marian Manton, University of Oxford (JISC 2009)

## Step 1
### Consider the situation factors
'Knowing your audience' and the 'context' in which your unit sits provides us with the kind of intelligence needed to support good decision-making when it comes unit design. Factors affecting a unit include: characteristics of your learners; context of the T&L situation and the learning environment.

## Step 2
### Establish your Learning Outcomes
LO's are statements that describe the observable knowledge, attitudes or skills students are expected to demonstrate as a result of successfully completing the unit. D2L uses the revised Bloom's taxonomy as a framework for characterising LO's; while D2L focuses on the cognitive domain you may want to include the psychomotor and affective domains:

## Step 3
### Consider feedback and assessment
Consider what students will have to do, to demonstrate that they have achieved the LO's. It's important here that assessment contributes meaningfully to the overall learning objectives and that you consider assessment as an opportunity not just to provide a mark, but an opportunity to develop other skills along the way.

## Step 4
### Integrate teaching/learning activities
Your T&L activities should provide opportunities for students to develop and/or practice relevant skills and knowledge to meet the LO's. Effective practice in a digital age includes selecting the most appropriate tools for the purpose but that requires you to be really clear about what you want to achieve by way of the learning experience. In this guide we've elected to characterise the learning experience dimension in online environments in 3 ways:

1. **Expository** – virtual or digital way of disseminating information/knowledge. Basically delivering content.

2. **Active** – where student has control over how he/she learns. The learner builds knowledge through inquiry-based manipulation of digital artifacts such as online drills, simulations, games, or microworlds.

3. **Interactive/collaborative** – The learner builds knowledge through inquiry-based collaborative interaction with other learners; teachers become co-learners and act as facilitators.

## Step 5
### Check for integration
Benefits arise when there is coherence between technologies and media, the learning tasks and outcome, and subject-specific demands of a unit. As a final check, as yourself how well all the 'bit's' fit with each other.

**For further information on Bloom's revised taxonomy:**

Anderson, L. W. & Krathwohl, D. R. (2001). A Taxonomy for learning, teaching, and assessing.

Bloom, B. S. (Ed.). (1956). Taxonomy of educational objectives: The classification of educational goals, by a committee of college and university examiners. New York: Longmans.

# 3 Engaging learners

## Eight SEBE principles of good cloud learning

The 8 FaST principles are adopted and modified from Graham, C., Cagiltav, K., Lim, B., Craner, J & T. Duffy *Seven Principles of Effective Teaching: A Practical Lens for Evaluating Online Courses*.

**1**

### "Be Present" at the Unit Site

The best cloud teachers – according to students – are staff who show their presence multiple times a week, and at best daily. There are many tools that enable staff to create the illusion of being there!!

- Create a "Welcome" News item that includes an introduction on the unit site home page that gives students a sense of who you are.
- Include a photo of yourself in the Welcome news item.
- Even better, create a short welcome video
- Consider setting regular times when you can meet in a virtual space, e.g. live chat or online conferencing

**2**

### Set very clear expectations for your students and for yourself as to

i. **how you will communicate and**
ii. **how much time students should be working on the unit each week.**

This principle cannot be overemphasized; making expectations explicit is imperative. Include on your unit site a set of expectations for how students communicate online and how they communicate with you.

- Set clear expectations at the beginning
- Establish communication protocols and parameters, e.g. agreed response time for queries
- Be clear as to how much effort and time is required on a weekly basis
- Use tools, such as discussion forums, where responses and content can be shared with everyone and archived for flexibility in access and review

**3**

### Create a supportive online community

Students tell us that they need to feel part of a community – with each other, and the teaching staff.

- Design your unit with a balanced set of interactions – staff to student, student to student and student to resources
- Provide an introductory discussion topic for students to introduce themselves to each other, start it by introducing yourself...
- Provide a Student only unmediated discussion topic where students can ask questions of each other and exchange information
- Ensure you check the discussion forums on a regular basis, replying to queries or responses students may have
- Encourage participation of others in discussion topics by posing open questions
- Provide a time in BB Collaborate where students can login and ask questions, work together on group work, participate in a tutorial.

## 4

### Develop active learners: use a variety of large group, small group, and individual work experiences

A community works well when there are a variety of activities and experiences that engage students individually, as well as collaboratively with their peers.

- Build in options and opportunities for students to work together and individually
- Vary the type of activities that are given to students such as problem based, experiential or inquiry based tasks
- Consider establishing virtual teams; particularly effective when working on complex case studies or scenarios
- Use News or Events to provide students with timely reminders or updates

## 5

### Prepare Discussion Posts that Invite Questions, Discussions, Reflections and Responses

Discussions in an online unit are the equivalent of class discussions in a face-to-face class. A key difference, of course, is that these discussions are asynchronous, providing time for thought and reflection and requiring written /and or audio responses that become part of a unit archive

- Ensure discussion forums and topics are well organised
- Assign a timeframe to heighten participation
- Allocate marks for Discussion Board contributions
- Consider moderation of posting either by self or tutors
- Use a forum to support exam revision

## 6

### Combine core learning with customised and personalised learning

Once you've identified the core learning objectives for your unit, seek opportunities to build in increasingly complex and customised projects to extend and deepen student's understanding.

- Build in options and choices in assignments and special projects.
- Provide complimentary activities that enable individuals to address unique learning needs and study at multiple levels of complexity
- Build in optional extension activities

## 7

### Focus on resources, applications and links that are easily accessed from learner's unit sites

If content is not digital, it is as if it does not exist for students. This means that students will be more likely to use resources and applications that are available from within their own unit site.

- Use URLs to related content such as e-readings, articles and other relevant web site links
- Use Web2.0 Applications such as Google Docs or Wikis to use for collaborative purposes
- Consider some audio or video content – ensure this can be accessed anywhere

## 8

### Seek informal feedback

Early feedback surveys or just informal discussions ask students to provide feedback on what is working well in your unit and what might help them have a better learning experience and so corrections and modifications can be made. It is an easy opening for students who might have comments or suggestions or questions.

- Use the survey tool to build-in a mid-trimester survey
- Dedicate a forum to canvass ongoing informal feedback
- Draw on inbuilt monitoring such as student tracking and "intelligent agents" in *CloudDeakin*

# 4. Technology in practice

There is an increasing range of different technologies at your disposal. Deciding on which tool to use and thinking about how to use it, and when to use it, depends on a number of factors which have been discussed in this guide, including perhaps most importantly the learning outcomes established for your unit. Other situational factors such as group size and viability should be taken into consideration. Some tools work better in small groups, others work better as a supplemental resource.

In this section we've endeavoured to map the kinds of learning experiences you might want to provide with a range of online applications. We draw upon a conceptual framework developed by the U.S. Department of Education (2009) but have adapted to suit our environment. They cluster learning experiences as **expository**, **active** and **interactive** against a range of available applications.

They suggest that one way of thinking about what applications might be useful is to consider the extent to which you imagine your learners to be working in **'real time'** or where activities are **not time dependent**. (pg. 3 & 4)

U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies, Washington, D.C., 2009.

**Learning Experience**   Ask yourself?  What do you want your students to do?
**Time Dependency**      Ask yourself?  Do you imagine your students to be working in 'real time' [synchronous] or on activities that are not time dependent [asynchronous]?

| Expository | Active | Interactive/collaborative |
|---|---|---|
| Essentially virtual or digital way of disseminating information/knowledge – delivering content | The learner builds knowledge through inquiry-based manipulation of digital artefacts such as online drills, simulations, games, or microworlds. The focus here is primarily on applications that give students control over how they learn. | The learner builds knowledge through inquiry-based collaborative interaction with other learners; teachers become co-learners and act as facilitators. The key element here is that the focus is on using applications that connect students and teachers in meaningful ways. |

| Applications | **S** Synchronous | **A** Asynchronous |
|---|---|---|

**S** Live one way **BB Collaborate** session

**i-lecture** [audio and video recording]

Podcasting is a way of delivering audio materials via the internet. They can be listened to on a computer or downloaded on to an iPod or MP3 player for listening to at any time.

**Screen Capture** software enables you to make a video with **voice over** of anything that takes place on your computer screen. It can be used for software demonstrations and 'how to' tutorials; to produce short informal videos by talking through something on your computer; to provide audio feedback on student work; to capture live events from a computer screen for later use. There are a range of free applications available to download such as **Jing** and **BB Flashback** Express and commercial ones such as **Camtasia Studio**. In **PowerPoint** you can include a "talking head" video of the presenter to personalise a recording.

Narrated PowerPoint presentations can be made with **iSpring**. It transforms your slides into a professional looking video, converting it into a Flash file. http://www.ispringsolutions.com/free_powerpoint_to_flash_converter.html (note academic licensing requirements).

**E-readings** or other web-based resources

**Storage** of 'written' or 'visual' material, e.g. Powerpoint slides

**A** Integrated online quizzes can be automatically marked by the system with the option of feedback and used for diagnostic testing and for both summative and formative assessment.

Other integrated tools, such as **Private blog** or the **self-assessment** tool can be used for private reflection. In the later student may choose to make them public

e-portfolio enables students to compile digital objects demonstrating experiences, achievements and evidence of learning. E-portfolios provide learners with a structured way of recording their learning experiences and work history

**StudyMate** – a study assistance activity development package allows you to create flash-based activities and games www.deakin.edu.au/itl/dso/tools/studymate.php

**Simulations** are usually an interactive "facsimiles" of discipline specific functions or workplaces and may contain tasks which can be practiced and/or assessed.

**S** Technologies such as **chat** and **online conferencing**, which is particularly useful for off campus students. Telephones still provide a low-tech option for connecting with students.

**BB Collaborate** is a virtual classroom used at Deakin to provide a whiteboard, text chat, and audio/video facilities in real-time. It uses interactive features such as application sharing to demonstrate the use of programs, breakout rooms for small group work and polls/feedback/hand-raising to survey participants. It can be used for tutorials, project work, and online meetings in a collaborative learning environment.

Another useful application to connect with students is **Skype** www.skype.com which is free software and allows users to make free calls, video calls and instant messaging over the internet. Files can also be shared.

**Instant messaging** – There are many technologies to utilise for synchronous text chat. Among them is Skype, and it is also available in D2L, known as "Chat"

**A** **Integrated technologies** such as blogs, wikis and discussion forums.

A blog is an online log or diary, often used for personal opinions and reflections. Blogs may also be used for sharing ideas with a group.

A wiki is a web site which can be edited. It is often used for collaborative writing or for publishing resources, pictures and links to favourite sites. It may include a discussion area.

Ideas for using blogs and wikis
- use a blog for a learning log or journal. Activities could be recorded in a reflective diary – Use a blog for a review of a piece of software, web site, journal article. Others can comment on the review
- use a wiki for collaborative group work. Wikis can be setup so all groups have the same information and separate areas can be given to specific group members. A wiki could also be used to support course queries or course concepts. FAQ's could be archived where both staff and students could contribute

Use existing video or create your own **video resources**. Deakin provides a TV and Radio Recording Service https://staff.deakin.edu.au/services/content-media/recording/ records and distributes 'off-air' recordings on behalf of staff. Programs can be recorded from free to air TV, Foxtel Digital (Education Package) and AM radio. Recordings can be uploaded to the iLecture system for delivery online. There are also many gateways to video resources such as YouTube and iView

**The reality for most us is that we'll provide students with a range of learning experiences most appropriate to our objectives. Applications such as face book serve multiple learning experiences.**

- use a wiki to produce a good practice guide.

**Discussion forums or threads** within *CloudDeakin*

**Online collaborative** web sites such as **Drupal** can be requested and set up at Deakin to support a 'community' outside of the LMS where staff and students share an online work space. See http://communities.deakin.edu.au/help/

**Social networking** web sites such as **Ning** (which is similar to Facebook but allows for closer control and moderation) provides a space where students can communicate with each other using forums, blogs, or live chat facilities. Photos and videos can be easily shared, groups can be set up and 'members' can set up their own profiles.

# 5. Getting help

**Faculty Learning Support Team Key Contacts**

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