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The Guide to Fostering Asynchronous Online Discussion in Higher Education

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FOLD
Fostering OnLine Discussion
www.fold.org.au

ENDORSEMENTS OF THE GUIDE (EXCERPTS)

“The Guide to Fostering Asynchronous Online Discussion in Higher Education is a timely and exceptional resource for online lecturers wishing to maximise the effectiveness of discussion forums in learning management systems. It provides a model of four essential principles that can guide the design and implementation of online forums, to truly maximise the benefits for students. As such, it provides guidelines that go beyond the types of advice frequently found, such as ideas and tips for ‘ice-breakers’ ... [and] far exceeds these low level approaches, to systematically take the designer/ lecturer to facilitate deeper levels of communication.”

Professor Jan Herrington
Murdoch University

“The authors are to be congratulated on producing this guide, which fills a significant gap for the many academics teaching online, who are seeking ways to better connect with their students asynchronously, to help students engage with content in meaningful, constructive ways, thereby enriching and deepening their learning.”

Dr Cathy Stone
2016 Equity Fellow and 2017
Visiting Research Fellow
National Centre for Student Equity
in Higher Education
Conjoint Senior Lecturer
The University of Newcastle

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INTRODUCTION TO THE GUIDE

Purpose of this guide

This guide articulates a set of principles to help University lecturers¹, and other teaching academics in the Higher Education sector, to set up and conduct successful asynchronous online discussions for the students in their distance or flexible delivery courses. These principles are based on theory, a review of the literature and research trials conducted in our postgraduate and undergraduate courses at University of Wollongong (2013-2016), and subsequently² in postgraduate and other courses at Victoria University, Central Queensland University and University of the Sunshine Coast (2016).

Specifically, we aim to assist educators in conducting what we have labelled 'productive online discussion' – discussion where the students are engaging in a meaningful exchange of ideas in an attempt to solve a 'problem' aligned to the course learning outcomes. The mode of communication in such discussion is a mixed one of written texts with spoken-like characteristics, described as “a cross between writing and speech” (Wegerif, 1998, p.40). The conversational written style of the posts collectively produces a sustained, coherent dialogue, as opposed to a simple 'display' of ideas. For interaction to be meaningful it should include “responding, negotiating internally and socially, arguing against points, adding to evolving ideas, and offering alternative perspectives with one another while solving some authentic tasks” (Woo & Reeves, 2007, p. 23).

The Guide provides principles which, rather than being prescriptive, are intended for lecturers to use creatively when guiding their own online teaching.

Advantages and challenges of asynchronous online communication

Without doubt, productive discussion is easier to conduct in face-to-face situations - where individuals are collaborating around a task for the purpose of learning. Face-to-face discussion has a number of benefits including the opportunity for immediate, on-the-spot clarification and the presence of real meaning-making cues such as gesture, voice tone, facial expressions, body language. Participants can listen to one another, interrupt, gesture, roll their eyes, negotiate, come to agreement (or not), give explanations to immediately justify their choices or opinions, smile, raise or lower their voice and draw on a myriad of other ways to convey their meaning. These, and many other meaning-making cues, comprise the social space of face-to-face interactions. As we know, however, face-to-face discussion is not always available and increasingly universities are offering more flexible course delivery for students. So, how might the success we can achieve in face-to-face discussion be replicated in the online teaching space and, in particular, in an asynchronous online discussion forum?

A number of problems have been identified which might hinder students' learning in online discussions. These include: a lack of engagement; limited interactions among participants; low contribution rates and, lack of academic focus (Delahunty, Verenikina & Jones, 2014; Wang & Chen, 2008; Wen-Yu Lee, 2013; Boling et al., 2012; Kim et al., 2016). A review of the literature demonstrates that factors among academic staff which lead to poor online discussion include: lack of clarity for staff about how discussion 'works' in asynchronous contexts, their previous experiences with online forums often being less than satisfying; the urge for staff to assess discussion; and, lack of time or skill for staff in designing pedagogically sound online discussion tasks which encourage productive discussion (Delahunty, Verenikina & Jones, 2014).

¹The term 'lecturer' is used throughout the guide to encompass the variety of teaching roles in higher education

²Funded by OLT Seed Grant 2016, SD15-5131

What does the Guide offer?

When based on pedagogically and theoretically sound strategies, productive online discussion has strong potential for enriching students' learning through 'joint construction of knowledge' (Delahunty, Jones & Verenikina, 2014). Knowledge construction can be defined as "the process whereby students undertake social exchange with their lecturer or peers in order to create and apply new understandings that resolve dilemmas and/or issues they are facing" (Koh et al., 2010, p. 285). Online discussion has been shown to promote knowledge construction in an even more effective way than face-to-face discussion because there is time for reflection and extended opportunity for interaction (Brace-Govan, 2003; Guiller, Durndell & Ross, 2008). However, if the online discussion is not well designed or monitored and does not lead to meaningful interaction, its potential for learning will not be realised.

From our previous research, we found that there are four interrelated components essential to designing and conducting successful online discussion in an online or flexibly delivered course:

- 1** **OUTCOME ORIENTED TASK DESIGN**
The discussion tasks are engaging and explicitly linked to learning outcomes
- 2** **EXPLICIT COMMUNICATIVE STRATEGIES**
Academically oriented online communicative strategies are explicitly taught including examples of language choices
- 3** **INTERACTIONAL SCAFFOLDING BY THE LECTURER**
The lecturer's presence in the online forums ensures that the discussion goes smoothly and that learning outcomes are achieved
- 4** **CLEAR EXPECTATIONS FOR PARTICIPATION**
The requirements for student participation in online discussion are outlined in a clear and simple way

The four components for designing and conducting a productive online discussion are explained and exemplified in the next four sections of this guide.

We present these guiding principles and examples in relation to each of the interrelated components so educators can take them inventively to adjust and apply to their own specific courses and disciplines.

OUTCOME ORIENTED TASK DESIGN

Introduction

In this section we discuss the principles for designing an engaging task for asynchronous online discussion. The purpose of the discussion task is twofold:

- to reinforce and extend learning outcomes
- to create a joint point of reference for a group of students to focus on and to shape their interactions

At the end of this section, we include two examples of tasks and explain the ways that they were designed in relation to the outlined principles.

Designing a task for asynchronous online discussion

Creating a stimulating task is an essential part of successful online discussion. We look for tasks which can intrinsically motivate students' participation but also meaningfully link their discussion to learning outcomes.

Tasks that are engaging are designed around a problem where students are set to achieve a common goal such as searching for missing information and finding a solution to the problem. To stimulate a debate and provoke the expression of different, or even contradictory points of view, the task needs to include an element of controversy, such as in a case where a disagreement between the characters is presented. The authenticity of the case would allow students to draw on insights from relevant prior experience, e.g. life, work and education (Herrington, Reeves & Oliver, 2010). The aim is to invite collective and cumulative contributions which co-construct knowledge and are clearly aligned to learning outcomes (Delahunty, Jones & Verenikina, 2014).

Online discussion forums will be productive in relation to students' learning if they are integrated into the subject learning outcomes, rather than simply designed as an 'add-on' for student engagement. The motivation to participate will be stronger for students as adult learners if connections between their participation in the discussion and learning goals are clear, and if the task is meaningfully aligned to these goals.

An important distinction to make is that what an online discussion task should not be is one that an individual can do independently of others. For example, 'Read your lecture notes and answer the following questions'. Even if the answers to such questions are posted to a public discussion space, such a task is designed for 'viewing' rather than for encouraging 'reciprocity'.

A useful approach to consider when designing meaningful discussion tasks is to begin with the end in mind, such as 'constructive alignment' (Biggs & Tang, 2011; Nightingale et al, 2007). This involves working back from a particular learning outcome and, at each point, thinking about what students will need to understand in order to arrive there. When designing the task, consider:

- the kinds of concepts, issues or ideas that students will need to become familiar with – this links the task to the learning outcomes
- the resources they will need access to, including the lecture notes or reading(s)
- how you will build these into a discussion task (such as a case) so it is purposeful and related both to the course content and the students' prior experience

In a nutshell, tasks which have been successful for engaging students in productive online discussion, included the following components:

- an authentic issue to consider, such as a case study linked to current professional context
- a focus on solving some kind of problem
- a controversial element
- knowledge or skills drawn from those taught in the course

Additionally, successful tasks include clear instructions (addressed further in this Guide under *Clear expectations for student participation*) and are explicitly linked to communicative skills and strategies, which enable students to effectively make use of the discussions (more about this in the section *Explicit communicative strategies*).

Task examples

Below we present two examples of tasks which were designed for asynchronous online discussion in an Education postgraduate course. Each task is first presented in the way that it appeared on the discussion forum and then the design components are explained and analysed.

EXAMPLE 1

This task was designed for an online discussion forum in a flexibly delivered postgraduate Early Childhood Education course. It was linked to a course learning outcome, 'Understanding the role of children's talk in their learning and development'. It is framed through explicit instructions for participation in the discussion (further explained in Clear expectations for student participation) and linked to the communicative strategies that students are asked to use (further explained under Explicit communicative strategies).

Table 1 exemplifies the task as it appeared on the Learning Management System (LMS) for the students to respond.

Table 1 Example 1 - Task in a Postgraduate Early Childhood Education subject

Task:

Read the case and the statement, and respond with at least two posts (50-70 words), using the following communicative strategies (and not forgetting the previous strategies):

- Justifying your position through explanation: "perhaps what I'm trying to say is that ..."; "I'm not sure I agree with this idea because..."
- Presenting alternatives: "you commented that ... but another way of putting it might be..."
- Challenging the idea(s): "while you made the observation that xxx, in my experience this may not work because ..."

The Case:

A four-and-a-half-year old girl Masha was asked to get a candy from a cupboard shelf. A couple of stools and a stick were offered to her as possible tools to reach the candy. Researcher's description of the process of her problem solving reads as follows: (Masha stands up on a stool, quietly looking, holding the stick). "On the stool (Glances at the researcher. Puts stick in the other hand.) "Is that really the candy?" (Hesitates.) "I can get it from that other stool, stand and get it." (Puts the stick down and gets the second stool.) "No, that doesn't get it. I could use the stick!" (Takes the stick and knocks at the candy.) "It will move now." (Knocks the candy). "It moved, I couldn't get it with the stool, but the... but the stick worked." (Adapted from Vygotsky, 1978, p. 25)

Please discuss the following statement made by Ivan, a student assistant:

"Masha finally solved the problem, but it took her a long time. Of course, the task was not easy for a four year old, but she could have solved this problem much quicker if she didn't waste her time talking so much!"

In Table 2 below we analyse the task in relation to its interrelated components. The left column shows the task components, and the right column provides the rationale for their design.

Table 2 Annotated task: Example 1

The task, as it was presented to the students on the Forum	Analysis of the task components
Read the case as well as the statement, and respond with at least two posts (50-70 words)	An explicit and straightforward instruction to set the parameters for the length of the required post
<p>...using the following communicative strategies (and not forgetting the previous strategies – see the guide to forum 4 for more detail):</p> <p>Justifying your position through explanation (“perhaps what I’m trying to say... “</p> <p>Presenting alternatives (“you commented that ... but”)</p> <p>Challenging the idea/s (“while you made...”)</p>	<p>Explicit instructions for the use of communicative strategies, including a link to an additional resource - guide for forum 4.</p> <p>Specific communicative strategies that the students need to use. The instructions also include brief examples of wordings that can be used for each strategy.</p>
<p>A four-and-a-half-year old girl Masha was asked to get a candy from a cupboard shelf. A couple of stools and a stick were offered to her as possible tools to reach the candy. Researcher’s description of the process of her problem solving reads as follows: (Masha stands up on a stool, quietly looking, holding the stick). “On the stool (Glances at the researcher. Puts stick in the other hand.) “Is that really the candy?” (Hesitates.) “I can get it from that other stool, stand and get it.” (Puts the stick down and gets the second stool.) “No, that doesn’t get it. I could use the stick!” (Takes the stick and knocks at the candy.) “It will move now.” (Knocks the candy). “It moved, I couldn’t get it with the stool, but the... but the stick worked.”</p>	<p>The case is intentionally linked to the learning outcome related to the important role of children’s talk in their learning and development. In the case, Masha, 4, is talking to herself aloud while trying to reach a candy. Her talk closely relates to what she is doing as she guides her problem solving. Talking aloud is an essential and inextricable part of young children’s learning and development. This topic was also covered in the lecture.</p> <p>The case resembles an authentic activity which early childhood educators often observe in their everyday work with young children.</p> <p>The case was adapted from the book of Vygotsky (1978) which was on the list of recommended reading for the course.</p>
<p>Please discuss the following statement made by Ivan, a student assistant: “Masha finally solved the problem, but it took her a long time. Of course, the task was not easy for a four year old, but she could have solved this problem much quicker if she didn’t waste her time talking so much!”</p>	<p>The discussion statement adds a ‘controversial element’ and frames it as a dilemma: Ivan’s statement contradicts the view that students need to understand. Ivan’s view has to be challenged by the students in their discussion to achieve the learning outcome.</p>

EXAMPLE 2

The second example of a discussion task based on the same principles is presented in Table 3 below. The task example presented below was designed for an online discussion forum in a flexibly delivered postgraduate Teacher education course in Educational psychology. It was linked to the learning outcome, 'Understanding student motivation in the classroom'. Similar to the task presented in the previous example, it was accompanied by specific instructions and linked to specific communication strategies. It appears here as it was presented to the students on the Learning Management System (LMS).

Table 3 Example 2 - Task in a Postgraduate Educational Psychology subject

Read the case below:

Jessica is an experienced year 4 teacher. In conversation with a new teacher, Matt, who just joined the school, she is saying: "Kids these days don't listen as well as they used to. They spend less time attending to things and we have to do a lot more to engage them".

She then asks Matt's opinion on a couple of strategies that she wants to use. She explains that students might be more motivated if they accept responsibility for their learning. Her class is currently doing a unit on kites, and she is going to give students freedom to form their own groups and to choose a topic for their research (e.g. how to make kites or how they are used in festivals). She also wants to use verbal presentations, claiming they are motivating because students feel "proud of doing well in front of their peers". For example, her students are asked to give a verbal presentation on their current unit on kites.

However, Matt suggests that she could motivate her students more effectively if she uses a system of rewards. For example, she could divide the class into groups and award points for good behaviour or correct answers, but deduct points when students don't behave or are off task. He suggests using the Interactive Whiteboard to display the points for everyone to see.

Whose ideas would you support, Matt's or Jessica's?

Write at least two short posts of approximately 50-70 words: one in response to the case and one to another person in the group or you can choose instead to make two posts in response to at least two people in the group.

Use the following communicative strategies in your responses to other students:

- Re-stating: to clarify or refine ideas - repeat in your own words ("as you said, ...")
- Extending ideas of others: to add more information or a new perspective ("you said ..., and...")
- Presenting alternatives: to propose a different perspective ("you said...but on the other hand...")

Don't forget to use the strategies from the Introductory Forum (Forum 1):

- Addressing people by name
- Acknowledging their ideas by complimenting and supporting them
- Agreeing or respectfully disagreeing with their point of view

The above case was designed to encourage the students to think about different approaches to motivating children's learning in the classroom – either extrinsic motivation (Matt) or intrinsic motivation (Jessica). This case was relevant to the students in the teacher education course as it represented a case from an authentic classroom which education students could relate to.

Table 4 provides an analysis of the task in relation to its interrelated components. The left column shows the task components, and the right column provides the rationale for their design.

Table 4 Annotated task: Example 2

The task, as it was presented to the students on the Forum	Analysis of the task components
Read the case below	Explicit instruction
<p>Jessica is an experienced year 4 teacher. In conversation with a new teacher, Matt, who just joined the school, she is saying: "Kids these days don't listen as well as they used to. They spend less time attending to things and we have to do a lot more to engage them".</p>	<p>The introduction sets up an authentic scene which education students can relate to. It also outlines the area of their current professional concern – school children engagement (or disengagement) with learning.</p>
<p>She then asks Matt's opinion on a couple of strategies that she wants to use. She explains that students might be more motivated if they accept responsibility for their learning. Her class is currently doing a unit on kites, and she is going to give students freedom to form their own groups and to choose a topic for their research (e.g. how to make kites or how they are used in festivals). She also wants to use verbal presentations, claiming they are motivating because students feel "proud of doing well in front of their peers". For example, her students are asked to give a verbal presentation on their current unit on kites.</p>	<p>The case is explicitly linked to the learning outcomes related to children's motivation, however the terms 'intrinsic' and 'extrinsic' motivation were not made explicit to the students - they had to identify those types of motivation themselves by linking their theoretical knowledge to this practical example.</p> <p>The authentic activity is well familiar to postgraduate students in the teaching profession which they can relate to and therefore connect to their prior experiences.</p>
<p>However, Matt suggests that she could motivate her students more effectively if she uses a system of rewards. For example, she could divide the class into groups and award points for good behaviour or correct answers, but deduct points when students don't behave or are off task. He suggests using the Interactive Whiteboard to display the points for everyone to see.</p>	<p>A controversial element: including an alternative view which is different to the previous one. The case is set up as a dialogue between the two teachers who had different views on motivation in the classroom. Jessica's view supports intrinsic motivation, while Matt's – extrinsic motivation. Understanding the difference and complementary nature of extrinsic motivation is the learning outcome.</p>
Whose ideas would you support, Matt's or Jessica's?	Explicit instruction directing the students to attend to the controversy

1

Write at least two short posts of approximately 50-70 words: one in response to the case and one to another person in the group or you can choose instead to make two posts in response to at least two people in the group.

Use the following communicative strategies in your responses to other students... [as listed in Table 3]

An explicit and straightforward instruction to set the parameters for the length of the required post.

Explicit instructions for the use of specific communicative strategies, including a link to an additional resource - guide for forum 4.

The instructions include brief examples of wordings that can be used for each strategy.

To conclude, this section provided the steps and detailed examples on the design of discussion tasks, which will focus the students' interaction around solving an authentic problem relevant to their profession. The link to learning outcomes is essential to make the discussion task relevant to the students' professional learning - a motivating feature for adult learners.

Examples of how these tasks were designed are included under *Designing asynchronous discussion worksheet in this Guide (Tables 9 and 10)*.

EXPLICIT COMMUNICATIVE STRATEGIES

Learning how to communicate effectively in an online educational environment requires a skill-set, which is different to those required in the face-to-face environment.

Effective engagement in a productive online discussion requires the learner to master a particular set of language-based academic communication skills. These skills are not often explicitly taught. Even though it may be fair to assume that modern students are quite experienced in everyday social media interactions, this does not necessarily mean that they possess the skills for participating effectively in academic online discussion, which leads to creating new meaning in a particular discipline area. These strategies need to be made explicit to students, to support their participation in online discussion forums.

The online communicative strategies detailed in this section have been drawn from literature on knowledge construction (e.g. Hendriks & Maor, 2004) and authentic language examples from detailed linguistic analyses of a variety of forum discussions in higher education (Delahunty, Jones & Verenikina, 2014)

Based upon the analyses in conjunction with interviews with students and lecturers, these explicit communicative strategies make visible the language choices suitable for engaging students effectively in online discussion, and include rationales so that the benefits of engagement are understood. These strategies go hand in hand with well-designed tasks (addressed in the section Outcome oriented task design) and are not meant to be used in isolation.

The three sets of communicative strategies suggested in this Guide aim at gradually guiding the students' discussion from creating a sense of belonging to joint knowledge construction.

- 1 The purpose of the first set of communicative strategies is to foster a positive social space and encourage interpersonal relations. The introductory discussion is suitable for this first set of strategies and is good pedagogic practice for setting up a 'culture of discussion'.
- 2 The second set is for building a collective understanding of the ideas from diverse perspectives.
- 3 The third set is aimed at moving towards critical discussion to co-construct new knowledge.

The three sets of communicative strategies are detailed in Table 5.

Table 5 Online Communicative Strategies

1 Establishing a positive social space

In the first forum introducing yourself is a good opportunity to tell us a bit about your background and experience – you could also upload a photo (in My Profile) so we can all 'see' each other.

We also ask that you read and respond to others because in online discussion this is how we demonstrate 'listening' and being 'listened to' (this can help prevent feeling like an 'outsider' to the group).

When responding to others it is good to address the person (or persons) by **naming** them (e.g. *Hi Steven*).

You may also want to **acknowledge** something they've said by complimenting (e.g. *you made a great point about ...*) or support/agree with something they mentioned (e.g. *I had a similar experience ...* or *Like you, I love my job!*)

2 Building collective understandings

These communicative strategies will help us as a group to build a collective understanding of the topic or concept. It would be surprising in such a diverse group if everyone has the same ideas about the task, so forum discussion provides the opportunity for all of us to see and appreciate the range of perspectives that each person brings. Building a collective understanding not only helps broaden our individual knowledge but assists others to develop their understandings as well.

Based on this rationale, the communicative strategies you can use are:

- **Re-stating:** rephrase, clarify or refine an idea which may also reflect your perspective (i.e. using different terminology to say something similar), underlined in the following:
 - I do like the idea you said children's speech allows educators to understand how they think ... to observe children's thinking by listening to their talk will allow us to analyse their developing strengths and abilities ...;
 - Hi (name)... I'm in agreement with you that private speech is important for young children to solve problems ...
- **Extending ideas:** this adds some more information to what someone has said, or to what you have previously mentioned
 - adding a related perspective e.g. I agree with your reaction to XXX and I think the issue is also to do with Y ...
 - adding more information e.g. It's surprising to see the range of technology children have access to ... In my class we have two iPads, three desktops and three laptops ...
- **Presenting alternatives:** this allows for a broader discussion of an idea by proposing a different perspective e.g. *I agree with what you said ... but another point of view might be ...*

3 Constructing new knowledge

The purpose of this strategy is to begin to engage in some critical discussion of ideas and issues, by considering alternative views, presenting challenges, and (if necessary) justifying your position or viewpoint

- **Presenting alternatives:** this allows for a broader discussion of an idea by proposing a different perspective, e.g. *you commented that xxx, but another way of looking at it might be yyy*
- **Challenging the idea(s):** this is a good way to stimulate the discussion towards new understandings BUT can be tricky in online discussion. The key is to make sure you are challenging the idea and not the person, e.g. *you made the observation that xxx, but in my experience this may not work because yyy*
- **Justifying your position:** giving reasons to explain your ideas. This might be necessary to make your point clearer if there is some misinterpretation, or if it seems that others don't seem to understand your meaning, e.g. *I'm not sure I agree / disagree with this idea because ...; what I'm trying to say is that ...*

The communicative strategies are introduced gradually, from Set 1 to Set 3 but can be presented to the students in different ways. For example, we found it useful to create a short version of each set of the strategies and attach them directly to the discussion tasks for students to use (as exemplified in Tables 2 and 3 in the previous section). Extended versions including the rationale and explanation of the strategies were provided as a complementary resource for students to read at their own pace.

INTERACTIONAL SCAFFOLDING

Lecturer's participation in asynchronous online discussion.

By creating meaningful discussion tasks and explicitly describing how to communicate with peers, the lecturer provides a foundation for discussion, which enables students to sustain the momentum. This will occur when students are truly engaged, are clear about the expectations for engaging, and have the strategies to help construct their responses.

Nevertheless, as the lecturer, you also need to maintain a 'presence' in the forum space, providing students with 'interactional scaffolding' - on-going support at the moment of need. This provides reassurance, particularly important for distance students, as they are often anxious to make sure they are on 'the right track'. Knowing that you are monitoring discussion as it unfolds provides assurance to students that their lecturer is not too remote from the happenings and that they will be guided if the discussion strays from the intended outcomes.

Effective interactional scaffolding, however, does not mean that the lecturer has to respond every time someone contributes.

The role of the lecturer is crucial in aiming to ensure that:

- student interactions are supported through modelling discourse and ways of communicating
- knowledge is constructed (i.e. directing the discussion to keep it moving towards learning outcome(s))

It is also useful to be aware that students often model the tone and language the lecturer uses in discussion texts. Even if unintentional, the things you talk about and how you talk about them flags to students what you consider to be important (e.g. using the suggested academic strategies to model their use). If you give positive comments about certain things that your students post (such as "thanks for sharing about your son's experience – it certainly reminds us that as teachers we need to be sensitive") they will pick up that you value the sharing of relevant and personal life experience.

With experience, you can probably anticipate when or what concept is likely to cause students to become 'stuck'. As a timesaver, you could prepare for this by having a range of prompts - questions or statements which propose alternatives for the purpose of furthering the discussion - which can be easily accessed should you need to keep the discussion moving towards the learning outcomes (Blanchette, 2012).

The techniques of interactional scaffolding in asynchronous forums might include:

- instructing (providing clear, unambiguous directions; organising)
- steering the discussion toward shared understanding of the concepts by prompting, focusing, questioning and clarifying

(Delahunty, Jones & Verenikina, 2014)

Table 6 below displays the elements of Instructing and Steering, with examples from our data of how lecturers enacted their teaching support, taken from a range of forums.

Table 6 Interactional scaffolding: Instructional techniques

Instructing	
Directing	<i>I ask that you reflect on what you understand... and suggest articulating your thoughts by posting here...</i>
Organising	<i>Please click 'Reply' so that we can conveniently group or responses withing topics</i>
Steering	
Prompting	<i>My research interests and experience... related directly to what it means to be a fully literate person in the 21st century</i>
Focusing	<i>Another interesting point mentioned in the course notes reads...</i>
Questioning 1	<i>[to stimulate thinking]... Does anyone in this group speak another language and wish to share 'equivalents' for the term 'literacy'?</i>
Questioning 2	<i>[to feed forward]... I wonder what would have happened if the researcher would not allow the child to talk out loud... ?</i>
Clarifying	<i>What an interesting statement! I guess what you are trying to say is that there is no one 'right' answer - it depends on the theoretical point of view we are using...</i>

Providing appropriate support to students, which lays the foundations for learning and sociality in online discussion in order to gain momentum in the subject, may indeed require a little more effort in the set-up and beginning stages. However, once students are relieved of the 'guesswork' of how to participate and why discussion is beneficial to their learning, you should see the discussion space take on a life of its own.

CLEAR EXPECTATIONS FOR PARTICIPATION

Students need to have a clear understanding of the expectations for participating in discussion. From our research, we have found that getting learners to engage in online discussion forums can be difficult. Furthermore, it does not always result in actual discussion. Using extrinsic incentives - such as assessing (grading) the postings might have an impact on the kind of contributions learners make and may result in more of a 'display' of individual postings rather than in reciprocal interactions. While this kind of public display is useful for showing what individuals have done or how they have responded, it does not harness the pedagogical benefits which come from learning through interacting with others.

The instructions need to be expressed in a simple, clear and unambiguous way and need to address:

- the participation requirements, e.g. compulsory and are counted towards participation requirements, but not assessed
- the number of messages required to be posted for each discussion
- the genre of writing - to encourage reciprocity (e.g. spoken-like style; no references and quotes; not lengthy, leaving space for others' to contribute ideas/opinions)

Developing clear expectations for student participation in online discussion also requires consideration of the *audience*, as this will influence the nature of interactions. Be explicit about who the students are writing for e.g. if the task is not to be assessed, point out that the audience - even though you are monitoring their learning and may respond - is their peers.

In our research, participation in the forums was not assessed but instead was counted as 'an attendance requirement'. In keeping with the institutional requirement of 80% attendance, student participation was compulsory in at least 80% of online discussion forums. While mandatory participation tied to assessment might increase the number of posts, students may just post in a formal way to meet the requirements. Quality, in terms of collective knowledge building, can be sacrificed if the nature of responses is more akin to 'show and tell' rather than collaboration. Thus, we argue that effective participation in online discussion forums relies on explicit instruction about how to engage with the online learning community.

However, because the discussions were not assessed, the students in our research needed extra motivation for participation. This included regular reminders about participation requirements, posted to the announcement board.

Additionally, a reflective assessment task was offered for students to reflect upon their participation in the forums. This proved to be useful, as it added 'credibility' to the forums, i.e. students linked participation in the forums to assessment, increasing the motivation for 'quality' participation.

You can find excerpts from students' reflective essays at www.fold.org.au under *Student reflections*.

An example of a reflective assessment task from a Postgraduate Educational Psychology subject is presented in Table 7 below.

Table 7 Example of an assessment task linked to participation in online discussion

Assessment Task 2: Reflective Essay, 30%:

Social constructivist theorists believe that

[e]very function in the child's cultural development appears twice: first on the social level and later on the individual level; first between people (interpsychological) and then inside the child (intrapsychological)

Vygotsky, 1978, p. 57).

Discuss the idea that social interactions play a fundamental role in effective learning and teaching. Reflect on your participation in this subject and particularly in the Online Discussion Forums. You should consider the ways in which your interactions with others in these forums influenced your learning in the subject. In your reflection, provide specific examples to support your argument. Then, using your reflection and relevant reading, consider what this means in your practice as an educator.

To complete this assignment you will need to participate in online discussion forums, using the Discussion Guides provided on Moodle. Note: while the quality of your actual participation in online discussion forums is not assessed, the quality of your reflection on your participation is included in the assessment criteria

The online discussion forums were regulated by the request for students to make posts of between 50-70 words each, written in a spoken-like manner of communication with no quotes from, or references to, academic sources. This was to allow space for everyone to contribute (i.e. to prevent long, monologic posts which say 'everything' and requires time to read and comprehend); to keep the 'conversational' style of the discussion; and to reduce the time and preparation for participation (respecting the busy schedules and competing demands of other commitments of our students).

Based on our research, and as illustrated in the above example, we recommend that:

- *Instructions for participation are made explicit, clear, and unambiguous:* when there is a lack of opportunity for immediate clarification, learners need to know what you mean so they don't spend time trying to interpret.
- *Word limits are specified:* this encourages students to be concise, acknowledges that most people are busy and avoids participants having to write lengthy responses as well as reading others' lengthy posts in order to respond. It also leaves room for others to contribute, as

no individual should be telling it all – the aim is for all to have opportunities to collectively fill in the gaps.

- *The style of writing needs to be interactive, written in an informal, conversation-like manner, with no references or quotes:* formal academic style of writing (i.e. impersonal, inclusion of quotes, references and technical terms) is not really appropriate for online discussion, especially where ideas are being collectively explored and unpacked in order for students to gain new understandings. Writing to interact is focused on communicating effectively and appropriately – we recommend students reserve using academic styles of writing for written assignments such as essays and literature reviews where it is more appropriate.
- While participation in online discussion is not assessed, it is compulsory for the students and is marked as their 'attendance'. Expectations for participation need to be made clear to the students, e.g. they are required to make at least two contributions to each online discussion forum – responding to the case and/or responding to the post of another student.

DESIGNING ASYNCHRONOUS DISCUSSION (WORKSHEET)

The four components of successful online discussion outlined in this Guide are interconnected and work together to help the students to achieve the learning outcomes in a positive and supportive environment.

The Worksheet below (Table 8) can be useful for designing asynchronous online discussion experiences for your students as it follows the steps outlined in the Guide, including the task design aligned to learning outcomes; explicit communicative strategies; interactional scaffolding by the lecturer; and clear expectation for student participation.

In addition to the blank template, we have also provided two examples of how the worksheet was used in relation to the tasks presented in the Outcome oriented task design section (Table 2 and Table 3).

More examples showing how this worksheet was used in a number of tertiary learning contexts and discipline areas can be found at www.fold.org.au. A downloadable **Word version** of the worksheet is also available there.

Table 8 Designing asynchronous discussion - worksheet

1 OUTCOME ORIENTED TASK DESIGN	Discipline Area	
2 EXPLICIT COMMUNICATIVE STRATEGIES		
3 INTERACTIONAL SCAFFOLDING		
4 CLEAR EXPECTATIONS FOR PARTICIPATION		
	Level: PG / UG / Staff Learning	Mode: Blended (Flexible) / Fully Online

Learning Outcome(s)
Is the task authentic? How is it linked to learning outcomes?
What is the 'controversial' element, issue or problem to solve?
Anticipate / prepare for when you expect students will need steering (e.g. when the students do not address the concepts which you anticipated them to)
What communicative strategies will students be focusing on?
Explicit instructions for student participation
Planning for your participation (e.g. what do you anticipate your own participation will be? How will you organise discussion structure to suit your class?)

Below we include examples of how this worksheet was used to guide the students' asynchronous discussion experiences in two postgraduate education courses.

Table 9 Designing a task: Example 1

(for the description of the task used in this example see Table 2 of this guide)

1 OUTCOME ORIENTED TASK DESIGN	Discipline Area: Early Childhood	
2 EXPLICIT COMMUNICATIVE STRATEGIES		
3 INTERACTIONAL SCAFFOLDING		
4 CLEAR EXPECTATIONS FOR PARTICIPATION		
	Level: PG	Mode: Blended (Flexible)

Learning Outcome(s)
<ul style="list-style-type: none"> • Understanding the role of young children's talk in their learning and development: • It is important for young children to talk aloud when problem solving to guide their thinking. • Talking aloud is an essential part of young children's learning and development.
Is the task authentic? How is it linked to learning outcomes?
<ul style="list-style-type: none"> • The task includes a problem solving episode which is similar to the episodes that early childhood educators would observe in their everyday teaching practice • The task is linked to the learning outcomes because it exemplifies the phenomenon of 'talking aloud' and asks the students to discuss why it is important.
What is the 'controversial' element, issue or problem to solve?
<ul style="list-style-type: none"> • The controversial element is that the statement for the discussion contradicts the view that students need to understand. • The problem that the students have to discuss is whether the statement made by the character in the case (Ivan) was correct. • The students will have to argue for, and against, the statement thus refining their understanding

Anticipate / prepare for when you expect students will need steering (e.g. when the students do not address the concepts which you anticipated them to)

In their discussion I expect the students to address the following concepts

- Young children talk aloud to assist their thinking and problem solving
- Children have difficulties in solving problems if their talking aloud is discouraged
- Early childhood educators need to encourage young children's talking while doing any activity including problem solving

If the students do not touch upon these points in their discussion, I would have to prompt them by questioning or providing an example ('interactional scaffolding')

What communicative strategies will students be focusing on?

In this forum students are explicitly asked to use the following strategies:

- Justifying their position through explanation
- Presenting alternatives
- Challenging the idea(s)

Language choices are provided for each strategy. Additionally, students are reminded to use the 'positive social interaction' strategies which they used in the introductory forum, including 'addressing by name', 'acknowledging' and 'supporting others' ideas

Explicit instructions for student participation

It is made clear to students that it is compulsory for them to participate in all the forums; however, their participation is not graded, but counted towards class attendance.

Students have to contribute to each forum with at least 2 messages. Each message should be short, and written in a spoken-like manner. The suggested strategies should be used.

Planning for your participation (e.g. what do you anticipate your own participation will be? How will you organise discussion structure to suit your class?)

My participation in the forums will include

- Reading all the messages which students post but responding only when necessarily
- Identifying the moments when the students need clarification or prompt to keep them moving towards achieving the identified learning outcomes
- Replying to students who did not receive any responses to keep them feeling included
- Model the communicative strategies when posting my messages

Organisation: The subject enrolls 11 students so I keep them as one discussion group

Table 10 Designing a task: Example 2

(for the description of the related task see Table 3 of this guide)

1 OUTCOME ORIENTED TASK DESIGN	Discipline Area: Educational Psychology	
2 EXPLICIT COMMUNICATIVE STRATEGIES		
3 INTERACTIONAL SCAFFOLDING		
4 CLEAR EXPECTATIONS FOR PARTICIPATION		
	Level: PG	Mode: Blended (Flexible)

Learning Outcome(s)
<ul style="list-style-type: none"> • Understanding children's learning motivation in the classroom • Differentiating between 'intrinsic' and 'extrinsic' motivation • Understanding the advantages and disadvantages of these two types of motivation, and their interrelatedness • It is essential to nurture intrinsic motivation so children are interested in learning
Is the task authentic? How is it linked to learning outcomes?
<ul style="list-style-type: none"> • The task is authentic as it portrays a school-based case which relates to the postgraduate education students' work environment • The views of the characters in the case expressed in a detailed and practical way resembling everyday conversation
What is the 'controversial' element, issue or problem to solve?
<ul style="list-style-type: none"> • The students are asked to explain which character's point of view they will support. Because the points of view are opposite, this creates a controversy in the discussion • The students have to support and/or critique each point of view

Anticipate / prepare for when you expect students will need steering (e.g. when the students do not address the concepts which you anticipated them to)

In their discussion I expect the students to address the following concepts:

- Intrinsic motivation lays the foundation for life long learning
- Extrinsic motivation (e.g. awards, points) should be used with caution and only when it supports the development of children's intrinsic motivation
- If not used properly extrinsic motivation can be detrimental to intrinsic motivation

If the students do not touch upon these points in their discussion, I would prompt them by questioning or providing an example ('interactional scaffolding')

What communicative strategies will students be focusing on?

In this forum students are explicitly asked to use the following strategies:

- Justifying their position through explanation
- Presenting alternatives
- Challenging the idea(s)

Language choices are provided for each strategy. Additionally, students are reminded to use the 'positive social interaction' strategies which they used in the introductory forum, including 'addressing by name', 'acknowledging' and 'supporting others' ideas

Explicit instructions for student participation

It is made clear to students that it is compulsory for them to participate in all the forums; however, their participation is not graded, but counted towards class attendance.

Students have to contribute to each forum with at least 2 messages. Each message should be short, and written in a spoken-like manner. The suggested strategies should be used.

Planning for your participation (e.g. what do you anticipate your own participation will be? How will you organise discussion structure to suit your class?)

My participation in the forums will include

- Reading all the messages which students post but responding only when necessarily
- Identifying the moments when the students need clarification or prompt to keep them moving towards achieving the identified learning outcomes
- Replying to students who did not receive any responses to keep them feeling included
- Model the communicative strategies when posting my messages

The subject enrolls approx. 50 students so I divide them in 5-6 discussion groups

CONCLUSIONS AND LIMITATIONS

In this Guide we have presented four components identified as critical to facilitating productive asynchronous online discussions: outcome oriented task design, explicit communicative strategies, interactional scaffolding and clear expectations for student participation. We have explained and exemplified these with reference to our own tertiary teaching research and practice which confirm that when these components occur simultaneously, students' engagement and subsequent learning are fostered (see www.fold.org.au for research evidence and testimonials from lecturers and students).

The Guide reaffirms the importance of lecturers' presence, expertise and commitment to ensuring quality learning takes place. We recognise that enacting the suggestions contained in the Guide will vary across disciplines as each has their own distinct ways of working with knowledge and offers particular kinds of tasks in the apprenticing of students. While the examples in the Guide draw from educational psychology, other examples can be found on the [FOLD website](http://www.fold.org.au).

We do not suggest that asynchronous online discussion can replace face-to-face interactions, rather we aim to ensure it is best used to achieve the lecturer's pedagogic aims in an online environment. When planning for productive online discussion, we recommend considering the purpose of the forum in the overall subject design, asking such questions as: How does the forum co-ordinate with other modes of delivery such as face-to-face lectures and tutorials and individual study? How does it align with other online tools such as quizzes and video content?

Finally, we acknowledge that the Guide is limited to asynchronous online forums only, and it does not address the many challenges of integrating the array of tools available to lecturers and other subject designers in contemporary flexibly delivered higher education courses. We offer the Guide as a resource for refining academic practice as we strive to enhance our students' learning experiences in online learning.

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