

Designing effective online discussion forums

Design discussion forums to:

- engage students in approaches to deep learning
- achieve a high level of effective student participation
- be sustainable and workload friendly

Can online discussion be structured to achieve a effective student engagement, without an increase on staff workload? This resource proposes an approach to the design of sustainable online discussion forums by applying John Biggs (1999) and Bill Pelz's (2004) principle: "Get the students to do (most) of the work"

What does online discussion do well?

Online discussion offers an approach to learning based on structured dialogue and text-based discussion within a group or class context. A planned and structured approach to online discussion can achieve high levels of self-organised student participation and achieve effective learning.

Online discussion:

- is 'group-centred'. It counters the greatest use of LMS (learning management systems which is to post content online (Malikowski et al 2006)
- is the primary mode of online interaction for constructivist learning: learning based on interpretation and construction of the world rather than reflecting an external reality (Laudrillard, 2002)
- suits a collaborative model of interaction, exemplified by the **community of inquiry** model (Garrison, Anderson, & Archer, 2001).

Constructivist approaches to learning focus on student-centredness and individual construction of meaning, and bring two important metaphors for how learning occurs in online interactive settings in higher education: surface-depth, and the community of inquiry.

The social constructivism of Vygotsky (1978) holds that learning occurs through constructing knowledge through interaction. Two key authors in relation to deep learning and online discussion are Diana Laurillard (2002), who focussed on constructivist and dialogue models of online learning, and Salmon (2004), who supplies a practical model of socialising learners and structuring higher order learning through e-moderation. In particular Salmon offers 'key principles' to structuring discussion, including the important moment of summarising or providing closure to a topic. A helpful introduction to how the work of many of these authors informs online discussion can be found the article by Rachael Field (2005), "Favourable conditions for effective and efficient learning in a blended face-to-face/online method."

The model of **community of inquiry** involving the three presences: social, cognitive and teaching, has been foundational in much work with online learning (Garrison, Anderson, & Archer, 2001).

Effective learning is established by the three presences:

- Social presence: 'reflects the ability to connect with members of a community of learners on a personal level'
- Cognitive presence: 'the process of constructing meaning through collaborative inquiry.'

- Teaching presence: ‘the crucial integrating force that structures and leads the educational process in a constructive, collaborative and sustained manner.’ (Garrison 2006)

The intersection of these presences creates a community of inquiry. For a visual representation of the **Community of Inquiry** model, see

http://edutechwiki.unige.ch/en/Community_of_inquiry_model

Social presence and teaching presence are associated with high levels of participant satisfaction (Lowes, Lin, & Wang 2007; Gunawardena & Zittle, 1997). For a deeper discussion of the rationale and evaluation of effective online discussion, see Garrison (2006), Swan (2006) and Anderson (2003). Teacher presence has a central role in student responsiveness and engagement in discussion by Lowes, Lin, & Wang (2007, p. 190).

Can online discussion enable students to achieve deep approaches to learning?

Reflection and even dialogue are greatly limited in most campus based classrooms due to student numbers and dated pedagogical methods. There is evidence to suggest that online learning may in fact have an advantage in supporting collaboration and creating a sense of community (Garrison 2006).

‘Good teaching is getting most students to do higher level or deep learning’ (Biggs & Tang 2007; Ramsden 2003). Online discussion affords an environment in which to structure learning activities and assessments and rubrics around deep learning. The principal authors around this notion are John Biggs (Biggs and Tang 2007) and Paul Ramsden (1992).

Surface learning approaches

- Memorisation, recall, rote learning
- Learning for the exam, not retained
- Difficult to flexibly apply simple facts in workplace

Deep learning approaches

- Intimate, critical, applicable, embodied understanding
- Learning for life
- Able to adapt complex and critical understanding to professional situations

To encourage approaches to deep learning, design learning activities and assignments around the six levels of thinking described in [Bloom’s taxonomy](#), in which six levels of complexity of student understanding are elaborated (remembering, understanding, applying, analysing, evaluating and creating).

Palloff & Pratt (2005) suggest collaborative and community building activities based on learner to learner interaction:

- Case studies
- Small group projects
- Questioning techniques for collaborative discussions
- Blogs
- Debates
- Virtual teams
- Role play and simulations (pp, 55ff)

Can online discussion be structured to work effectively while managing staff workload?

“Get the students to do (most) of the work.” Pelz’s (2004) principle

Learning does not occur spontaneously among a group of students, whether the setting is face to face or online. Online discussion requires structure just as in a face-to-face setting.

Pelz (2004) and Dabbagh (2000) offer examples of protocols and rubrics for evaluation of online discussion. Pelz’s approach entails principles which promote increased levels of participation and delegating the interaction work to the students.

In the **Resources** section below, there are two ready-made netiquette examples. Alternatively, it can be useful to get students to create their own, or embed these expectations into the task requirements for online discussion.

Structuring your online discussion

1. Set your **purpose**: is the purpose of the discussion social or **task**-based? Does it link to learning outcomes, lectures/tutorials or assessment? Will it be assessed formatively or summatively?
2. Set **rules of engagement**: protocols: netiquette*, writing style. For example suggest an informal style of writing. Netiquette may consist of a ready made one page list, or may be an initial collaborative task with students. In either case, it is important to bring students into the progress and get their agreement. For netiquette examples, see References
3. Set up your **requirements** and **expectations**: specify the task, set the topic question (Toledo, 2006). If assessing discussion, use **rubrics** or evaluation criteria (Pelz, 2004; Dabbagh, 2000)

*Note that online discussion texts persist. It constitutes a public forum where individuals are identified, posts can become a printed record.

Following Salmon’s principles allows you to build interaction and learner to learner engagement:

- A small piece of information, **trigger question** or challenge (the ‘spark’)
- Online activity which includes individual participants **posting** a contribution
- An interactive or participative element- such as **responding** to the postings of others
- **Summary**, feedback or critique from an e-moderator (the ‘plenary’)

In Salmon’s [E-tivity model](#) (2004), discussion is strongly structured and supported (scaffolded) at the early stages, then this support is gradually withdrawn as learners become more independent and discussion shifts towards greater learner to learner interaction.

Salmon’s key principles <http://www.atimod.com/e-tivities/intro.shtml>

Designing discussion for engagement

Reflection and even dialogue are greatly limited in most campus based classrooms ... online learning may in fact have an advantage in supporting collaboration and creating a sense of community. An online learning environment reflects a “group-centered” interaction pattern versus an “authority-centered pattern” of a face-to-face environment. (Garrison 2006)

Strategies for engaging students

Use Table 1 to identify strategies for online discussion that you can use to engage your students. These strategies range from teaching to learning-centred approaches.

Online discussion strategy	Mode of interaction
<i>Teaching-centred, monologic</i>	
Facilitator posts announcements and updates	Information
Facilitator posts topic question and requests response	Topic – response
Facilitator posts topic question and requests a reflective response to the topic and to other posts	Moderated discussion topic
Facilitator posts topic question and a short time for brainstorming	Free discussion topic
Facilitator asks 1-2 students to moderate a topic	Student moderation of topics
Facilitator assigns groups to project work, debates or role play	Small workgroups
Students post assignment work and review their peers	Peer review
Facilitator posts topic question and a short time for brainstorming	Free discussion topic
Social, student managed social forum	Cafeteria, bulletin board forum
<i>Learning-centred, dialogic</i>	

Assessing discussion posts

You may want to build assessment into online discussion by a set of criteria or a rubric for discussion posts that are made available at the beginning of the unit. Useful readings are Meyer (2006) and Swan, Shen & Starr (2006). An example framework for assessing messages on a weekly basis is below (Anderson 2004), see Dabbagh, N. (2000). [Online-protocols](#). In Anderson 2004.

Summary

Following Salmon's [E-tivity model](#) (2004), a strategy for engagement in task-based topics may be organised around a cycle of **trigger question – moderation – wrap-up**:

1. **Group forums:** Organise students into groups – tutorial size or work groups – so discussion is more personal and manageable
2. **Short time frame:** Structure discussion around a series of topics that have a short duration, such as one or two weeks.
3. **Clear guidelines:** Provide clear directions to students, eg. "Post one response that puts a point of view, with a reference to the literature that supports your claim, and one response to agree or disagree with another student's post"
4. **Trigger-moderation-wrapup:** Introduce the topic with a focused trigger question. Moderate the discussion by responding periodically so that tutor posts provide a model for students. At the close of a topic, wrap-up the discussion with a final, summarising post.
5. **Student moderation:** After modelling topic moderation, assign students to moderate and wrap-up a topic.

Resources

Rubrics for online assessment

Dabbagh, N. (2000). *Online-protocols*. In Terry Anderson & Fathi Elloumi, (2004) (eds) *Theory and Practice of Online Learning*, Athabasca University.

<http://mason.gmu.edu/~ndabbagh/wblg/online-protocol.html>

Pelz, B. 2004 (My) Three Principles Of Effective Online Pedagogy, *Journal of Asynchronous Learning Networks* 8 (3), June, p. 43.

Bloom's taxonomy, TEDI, University of Queensland.

<http://www.tedi.uq.edu.au/downloads/assessment/bloom'slevelstinking.pdf>

Netiquette:

Student Guide: Netiquette, Macquarie University Online Teaching Facility.

<http://online.mq.edu.au/docs/neti.html>

Netiquette for online discussion, UTS.

http://www.iml.uts.edu.au/learnteach/utsonline/NetiquetteLevel3_2006.pdf

Readings

Anderson, T. (2003) Getting the Mix Right Again: An updated and theoretical rationale for interaction. *The International Review of Research in Open and Distance Learning*, Vol 4, No 2. <http://www.irrodl.org/index.php/irrodl/article/view/149/230>

Biggs, J. and Tang, C. (2007) *Teaching for Quality Learning at University*, SHRE & Open University Press.

- Biggs, J. (1999) What the Student Does: Teaching for enhanced learning. *Higher Education Research & Development*, Vol. 18, No. 1, pp 57-75.
- Brook, C. and Oliver, R. (2003). Online learning communities: Investigating a design framework. *Australian Journal of Educational Technology*. 19(2), 139-160.
<http://www.ascilite.org.au/ajet/ajet19/brook.html>
- Field, R. (2005) Favourable conditions for effective and efficient learning in a blended face-to-face/online method, *Australasian Society for Computers in Learning in Tertiary Education (ASCILITE)*, Brisbane, Australia. 4-7 December
http://www.ascilite.org.au/conferences/brisbane05/blogs/proceedings/23_Field.pdf
- Garrison, R. (2006). Online Collaboration Principles. *Journal for Asynchronous Learning Network (JALN)*, Volume 10, Issue 1 – February. http://www.sloan-c.org/publications/jaln/v10n1/v10n1_3garrison_member.asp
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, 15(1), 7–23.
- Gunawardena, C. N. & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a computer-mediated conferencing environment. *The American Journal of Distance Education*, 11(3), 8-26
- Laurillard, D. (2002). *Rethinking university teaching: A conversational framework for the effective use of teaching technologies* (2nd ed.). London and New York: Routledge Falmer.
- Lowes, S. Lin, P. & Wang, Y. (2007) Studying the Effectiveness of the Discussion Forum in Online Professional Development Courses. *Journal of Interactive Online Learning*. Volume 6, Number 3, Winter. www.ncolr.org/jiol
- Malikowski, S. Thompson, M. and Theis, J. (2006) External factors associated with adopting a CMS in resident college courses. *The Internet and Higher Education* 9(2006) 163 – 174.
- Meyer, K. (2006) The Method (and Madness) of Evaluating Online Discussions. *Journal of Asynchronous Learning Networks*, Volume 10, Issue 4 - December
- Palloff, R. M. & Pratt, K. (2005). *Collaborating Online: Learning Together in Community*. San Francisco, CA: Jossey-Bass
- Pelz, B. (2004) (My) Three Principles Of Effective Online Pedagogy, *Journal of Asynchronous Learning Networks*, 8 (3) June.
- Ramsden, P. (1992). Learning to teach in higher education. London: Routledge
- Salmon, G. (2004) E-tivities, All Things in Moderation. <http://www.atimod.com/e-tivities/5stage.shtml>
- Salmon, G. (2004). E-moderating: The Key to Teaching and Learning Online (2nd Ed.), New York: Routledge Falmer.
- Stacey, E. Barty, K. and Smith, P. (2005). Designing for online communities of learning. *ASCILITE 2005: Balance, Fidelity, Mobility: Maintaining the Momentum?* Brisbane, 4-7 December
- Swan, K. (2006) Online Collaboration: Introduction to the Special Issue. *Journal for Asynchronous Learning Networks*, Volume 10, Issue 1 February.
- Swan, K. Shen, J. & Starr, R. (2006) Assessment and Collaboration in Online Learning. *Journal for Asynchronous Learning Network (JALN)* 10 (1), February. http://www.sloan-c.org/publications/jaln/v10n1/v10n1_5swan.asp
- Toledo, C. (2006) “Does your dog bite?”: Creating Good Questions for Online Discussions. *International Journal of Teaching and Learning in Higher Education*, Volume 18, Number 2, 150-154. <http://www.isetl.org/ijtlhe/>
- Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Mental Processes. Cambridge: Harvard University Press. See also Galloway, C. (2007). Vygotsky's constructivism, http://projects.coe.uga.edu/epltt/index.php?title=Vygotsky's_constructivism