Promoting Learner-to-Learner Interaction in Online Distance Education

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Introduction

In face-to-face classes we take interaction for granted. We chat with learners, we ask questions, we respond to discussions, we provide feedback and we move naturally and fluidly between a variety of styles and functions. And the result is learning which is greatly enhanced because of the interaction. Learning becomes a consequence of the natural exchange among teacher and learners.

The potential for interaction between learners is what makes an online distance course different from traditional correspondence study or self-paced, independent learning. However, in online distance education the natural exchange among teacher and learners is not automatically present. Interaction can't be taken for granted because it just doesn't happen unless we really work at making it happen.

A significant challenge of the online environment is the asynchronous nature of most of the interactions. We post a message and then wait, sometimes for quite a while, for a reply. We don't have fluid, responsive discussions in the same way. Nevertheless, as the teacher and designer of a course we have instructional goals and objectives that can only be achieved by providing opportunities for, and supporting, learner interaction.

Learner-to-Learner Interaction

The distance education literature talks about two main types of learner interaction – that between the learner and the content, and between the learner and others. Where learners never or infrequently attend campus classes, it is particularly important to provide an environment where both types of interaction occur. This chapter focuses on the interaction between the learner and others – especially learner-to-learner interaction.

There are many purposes teachers might choose for developing and promoting learner-to-learner interaction. One significant reason is to develop, to some or other degree, an "online community." A second reason, based on the belief that all learners have something valuable to contribute to the

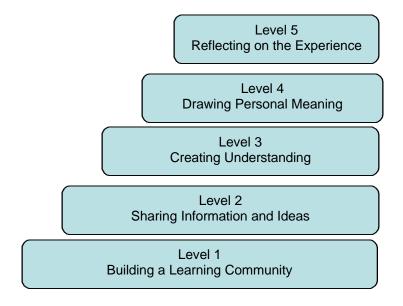
learning of others, is that they should be provided the opportunity to take responsibility in doing so.

In order to successfully build the development of a relevant and worthwhile "online community", learner-to-learner interaction must fulfill some or all of these functions:

- enhance social interaction
- aid understanding
- increase motivation by embedding interaction in meaningful activities
- promote the process of feedback through validation and challenge
- encourage reflection
- support learner independence

Levels Of Learner-To-Learner Interaction

Learner-to-learner interaction can best be viewed in a hierarchical structure with a set of five levels that describes the particular focus for the learner at each level. Each successive level builds on the previous one and adds additional substance to the interaction that is occurring between learners. ¹ The five levels, similar to the progression presented in Bloom's Taxonomy of the Cognitive Domain², begin with Building a Learning Community (Level 1), advance to Sharing Information and Ideas (Level 2), then to Creating Understanding (Level 3), next to Drawing Personal Meaning (Level 4), and finally to Reflecting on the Experience (Level 4). It is difficult for the learner to successfully move to a higher level until the preceding level has been achieved.



¹ Gilly Salmon (2004) also presents a five level learner interaction model in her book *E-moderating: The key to teaching and learning online*. The Salmon model, though appearing very similar, places primary emphasis on the role of the teacher – e-moderator – whereas the focus of this chapter is on the learner, what he/she is needing, experiencing, and learning via the interaction.

² See Chapter Five for a discussion of the Taxonomy of the Cognitive Domain (Bloom, 1956) and how it can be used in the design of distance education programs.

Level 1 – Building a Learning Community

"Online educators who understand that safe, nurturing learning environments are foremost in contributing to learners' happiness, sense of comfort, and ultimately rates of completion, place the creation of community high on their list of priorities." (Conrad, 2002 in McInnerney)

Social interaction is an essential aspect of learning. As teachers we strive to provide support and orientation to learners and, particularly in web-based classrooms, to provide opportunity for informal conversations and ongoing relationship building.

Paloff & Pratt (2002) explain that learners need teachers who get to know learners and how they learn, understand the learner's learning environment and influences on the learners, and understand learners specific needs for support.

Consider someone who has been an independent learner for much of his or her education. How might that person find an environment where participation involves sharing freely and depending on others to complete activities? He/she might struggle to shift thinking from being the sole owner and recipient of knowledge to a co-contributor and creator of shared knowledge.

What do learners need in order to feel comfortable interacting with each other online?

Learners need to understand the dynamics of communication in an online space, and to feel comfortable in presenting themselves. They need to be supported to make the transition from 'outsiders' to 'insiders'. (McInnerney, 2003). We can support this process by the choice of social, relaxed and low risk activities we create at the beginning of a course.

The process of warming up and forming the learning community can include a mix of synchronous and asynchronous communication. The goals should be that learners:

- 1) get to know one another and build relationships,
- 2) develop comfort with the technology, practicing the skills of online communication and conversation,
- 3) safely practice revealing themselves, and
- 4) reflect on their learning possibilities in this environment.

Here are some starter activities which work well.

- **Share a bio**, but give it a twist (a formative experience that is central to who you are today; the latest movie you saw and what was interesting about it; an interesting place you recently visited.)
- Play an online peer game (a guessing game who am I for your favourite movie star, thinker, famous person, learners post a description and respond by guessing who others are.)

• Ranking (pick your top six strategies for...getting through a course; how to secure the home computer for MY use; getting kids out the door on time; surviving holiday chaos. Learners post and respond to each other's ideas.)

Setting up a forum specifically for "chit-chat" or coffee is always useful. There is a lovely story of the learner who saw the message about meeting in the "Bar" with the class on Friday. He was most concerned about how he could travel that far in time until he realized it was the virtual "bar"!

In some courses teachers have commented that the forum is the place they have seen the most animated discussion and the most revealing comments. Why is this? First, there is little risk — the academic part of the course is somewhere else and there is no assessment associated with the coffee shop. Second, there is the element of choice — learners participate when they like, about what they like and to whom they like, and are therefore drawn to like-minded thinkers who affirm them. There is a lot to be learned from this! Some teachers I know have provided "rules" for this environment (no talking about the course content or assignments, etc.) while others have successfully left it open for the learning community to decide.

Level 2 - Sharing Information and Ideas

Information sharing activities are those which prompt learners to say, "Hey everyone, look at what I found!" "I've got this great idea!"

Information sharing can be a relatively light, non-threatening process or a getting deeper type activity depending on your purpose. It can relate to a specific formal activity, or be an ongoing ethos of the course. The key is in learners affirming and encouraging one another by contributing to the development of the learning environment. When successful, early information sharing activities can help establish a strong sense of participation and ownership in the online class. There are numerous ways to approach activities of this type.

Here are some starter ideas.

- Learners provide a hints list for those who are finding the online environment new or challenging.
- Ask learners to find a topic-related web-resource they really like (website, organization, article, etc) and describe why they like it, how it could be useful or what its quality features are.
- Learners submit their most useful/favorite URL which helps when studying online. The class votes on the best.
- Identify a particular website and have learners suggest 3 things found on the website that demonstrate a particular artistic/technical feature

To help establish the culture of your learning community, it works well to develop activities where learners give feedback directly to those who provide the information. Learners should be encouraged throughout the course to use ideas presented by other learners – and to credit the learner who originally suggested the idea.

Another activity to share information.

Learners select one of the resources provided and write a 50 word summary or abstract that tells a user the main ideas or features of this resource. Identify 3 key words that are appropriate to the resource and select a section heading that would help file this resource. The summary will go on a webpage that lists all resources in one place.

A culture of open acceptance of everyone's valuable contribution will begin to develop as learners see the value of not having to do all of the research alone. Contributing to the shape and design of a course allows learners to feel part of the learning process. If the content is not fully prescribed, then learners might enjoy the challenge of adding a new section; or filling out the resources section as they go on a "treasure hunt" for the best available free things on the web.

Simple pair feedback activities can be effective for promoting learner-learner interaction for sharing information, and for building learner's confidence online. You can choose to use email, or discussion forums.

Try this pair email activity.

• Learners are organized in two member teams (an information provider and a questioner). One learner provides the information – a story about something that went well; a solution to a problem; a hint for good essay writing etc. The other learner asks questions – Why did that activity work in your classroom? How did you get the _____ to work that way? Were there other things happening that might have changed the way that happened? After discussing this, they post a statement summarizing their findings to the class forum.

At a more sophisticated level, learners can be asked to share and offer feedback to each other on any activities they have completed (drafts, assessed activities, project planning etc). Valuable learning can be had by learners offering up a project, essay, review, or website for fellow classmates to learn from. The learning conversations could center around content of an item, or the process used to develop the item. This discussion benefits both the creator and the fellow learner. An online environment allows teachers to provide exemplars of previous work for learners to view and critique as part of the process of refining and practicing their own skills in the field.

Level 3 - Creating Understanding

Have you ever noticed it is possible to have a face-to-face discussion without the participants really listening to each other? If we are not careful, online discussion can turn into just such a faceless exchange of information. It can be very discouraging to provide what was assumed to be an exciting activity in an online class and then watch as faceless postings start appearing, one after another, that never move beyond basic information sharing. In such cases the class members look to the teacher's comments as the key ideas to respond to rather than the ideas of each other. In fact, many academic courses struggle to get past this level of interaction.

To avoid this, we need to create an environment where learners are consciously thinking carefully about what others have said, relating this to their own understanding, and responding in ways which promote discussion.

A good place to start is to provide specific structure for a discussion about something of interest about which your learners are likely to have an opinion. Giving learners a simple two stage instruction can help them understand that the purpose of the activity is to grow a conversation – not merely put up a posting. Adding a list of criteria that they can use to check their posting can further helps.

Here is an example of a simple structured discussion activity to facilitate understanding:

Reacting to a Newspaper Article

Read the news article on raising the legal driving age and consider – what are some of the interesting social issues surrounding this debate? What are the positives, the negatives? How would you be affected? How would your friends or family be affected? You will need to present a viewpoint on this topic.

Step 1: Create a posting that provides a summary of your thoughts and ideas. Then, state an opinion, ask a controversial question, suggest a resource for us to read to increase our understanding of the topic. End your posting with a lead statement/question for others to respond to – "What do you think?", "Would this work in your situation?" "How would the government respond to this idea?"

Step 2: Read the postings of others in your group. Select a posting which interests you and respond in the following way:

- Comment directly on the message(s) you are replying to this helps keep the line of argument clear for other readers. Use names.
- Where possible, make your posting respond to several previous postings. This will draw ideas together for you and your readers.
- Be respectful and give positive feedback where you can.
- End your posting with a lead statement for others to respond to "What do you think?" "Would this work?" "How does my idea sound?" "Can someone suggest a way to improve my idea?"
- Resist being long-winded no more than 100 words

This example has a clear structure and sequence, gives learners an opportunity to relate the situation to their own circumstances and experience, assumes some independence on the part of the learner, is built on reflection, and offers some choice and a degree of trust – all elements of good adult learning. A discussion will grow more easily out of a worthwhile activity when the learner is clear about what they are to do, and can see value in making the effort.

Here are some activities that can provide the foundations for good online conversations that promote understanding.

- Select a concept or model from your course and ask learners to find, share and critique real life examples.
- Provide a single resource a reading, picture, web page and ask learners to express an opinion.
- Ask learners to deconstruct a reading particularly suitable for difficult readings. Do this in sections.
- Find out what the professionals think working from the theories, concepts or ideas in your topics, ask learners to talk to professionals & share their findings and new perspectives.
- Ask learners to design a solution to a common problem.
- Develop a plan for action & provide feedback/critique.
- Investigate a topic and share the main ideas that arise. This could be a small group activity.
- Host an expert guest learners can "ask the expert" questions relevant to their studies.
- Write a five minute speech to convince a significant player of your opinion. Other learner's roleplay the response.
- Research and share opinions on the perspectives of various stakeholders.

Early interactions can falter as learners feel tentative and self-conscious about revealing themselves or their ideas. This often comes from a learner's belief that learning is an independent activity, and someone might either "catch me looking at another's work" or "steal my good ideas". Learners may need to be led gently into sharing their thoughts, and scaffold their trust and development. We may need to be very supportive early in a course, and more directive than we would prefer. Meaningful structure can be essential in order to help the learners move toward the level of understanding.

Here are some suggestions you can give learners to use as conversation starters.

- My first reaction to this topic was....
- What I don't understand about this topic is....but I do wonder...
- I really was surprised by....
- I am really confused by....
- The main point that I got from this was....
- Quote the part of the reading/resource you think is most important and explain why.
- Select an idea, concept or model and explain why it works in your context.
- Ask a question of the group.
- Explain your understanding of the concept, and ask the group some questions to clarify.

In teaching learners how to respond we need to highlight the importance of helping to move the conversation progressively further. Successive postings should capture the important ideas from previous postings and conclude in ways which further open up the discussion to more ideas and enhanced understanding.

- I like your ideas because... Other things I thought of were...
- I agree with the point that you made... I think we could think about...:

- I (respectfully) disagree with the point you made because... My opinion is...
- I have never thought about this from your perspective before. Did you consider...?
- I did not focus on the point that you discussed; instead, I thought that this ... other was more important for me...

Do remember to count the number of potential postings in a discussion and realistically assess what is reasonable. Sometimes it is good to appoint some of your learners as starter posts – if a class of 20 all post a starter-statement to a discussion, it leaves 20 open ends for others to consider – too much processing! In other circumstances small group discussions will be better. This way, learners can have a choice and responsibility as responders.

Our challenge is to support learners to integrate new ideas into their own, without expecting them unrealistically to comment on too many postings. We need to model and encourage the practice of drawing together the ideas from a number of postings into one response. It is important not to let conversations run too long without seeking a summary or conclusion. Summarizing points along the way can be made by the teacher or one of the learners in turns.

Level 4 - Drawing Personal Meaning

The next higher level of discussion is when you begin to ask learners to engage in a deeper form of learning where "meaning making" is the goal.. Some writers refer to this as academic or professional "dialogue."

Here is an example;

For Assignment #1 you are required to write an essay articulating your views on the differences between management and leadership.

To support you to do this, the next 3 weeks of our online discussions will examine the different views conveyed in the course readings, your responses to these and your personal views and experiences.

The main purpose of these discussions will be debate – for you to clarify what you think, to argue for and test your ideas on others, to relate your personal situation and experiences to the readings and to challenge and be challenged in your thinking. There are no right answers. There are some rules posted on the site for the process of respectful argument.

Your final essay must clearly argue a viewpoint, and show what has influenced your thinking as it has developed over the period of the discussions. You must quote readings, online discussions and other sources in your essay.

This activity focuses on the process of developing a personal and reasoned perspective or argument around an issue. Learners will have considered a wide range of ideas and perspectives

and the discussion would involve listening to, critiquing and responding to each other. The motivation for the learners is intrinsic to the activity, they are involved in order to provide evidence of the development of their thinking. In the process of that involvement, they are influencing and challenging other learners.

Some strategies for enhancing and deepening learning activities:

- Ensure there is a specific goal or activity to complete within a given timeframe.
- Organize learners to work in small groups.
- Require one member to take leadership responsibility for facilitating the academic conversation around one of your course key topics, issues or tensions.
- Bring in an online expert or practitioner to add their viewpoint and challenge the learners perspectives.
- Establish some guidelines for responses depth, quality and length.
- Promote inquiry and reflective thinking, and require learners to explain, justify, and reference statements being made.
- Ensure all participants promote open examination of the topic why are claims, beliefs, assertions held?
- Guide learners to take turns at summarizing the discussion at key points.
 This helps them practice summarizing skills, and hones the discussion to improve clarity and focus.
- Encourage several threads to run, to allow for learner choice and to enable a deepening of the learning.
- Encourage learners to initiate new threads on aspects arising from the arguments put forward.
- Evaluate the progress of the discussion Are learner's ideas changing and growing? Is the discussion deepening the group's understanding?

Some learning activities which promote deeper understanding include:

- Role plays
- Arguing from a given perspective
- Discussion as a response to:
 - controversial statements/quotes posted for critique
 - a recent speech by a politician/leader in the field
- A discussion developed around "So what...?"
- Information gathered and presented on a specific controversial viewpoint
- Structured debates
- Conversations with experts
- Critical thinking activities

Using an online debate to help learners draw personal meaning:

An online debate can be used as a powerful way for learners to draw personal meaning.

Ask learners to argue a position on a controversial issue that is open-ended (does not have an obvious right or wrong answer). Consider a controversial issue such as spanking children. Learners can be assigned to teams and argue for the affirmative or negative on a question such as "is spanking effective when guiding children's behavior?" Learners prepare for the debate by reading, talking to parents and teachers, and by researching the politics and social issues related to the topic. This type of discussion addresses engagement and relevance issues, and is an authentic situation for learners who might be entering the early childhood profession.

For this debate, the format can be synchronous (chat) or asynchronous. Teams can be used to develop and then present an argument. Timelines can support rapid-fire or more slow-thoughtful processes as desired.

Using a scenario to help learners draw personal meaning.

The following scenario allows learners to identify alternative actions that could be taken to meet guidelines for good practice. Used in an asynchronous mode, such an online role play would be conducted using parallel teams – each creating their own response to the situation. What actions would seem most appropriate? What should be done? Why? How could such a situation be prevented in the future?

Fred has called a meeting of all employees to discuss the purchase of a new binding machine. At the meeting, Joanne has voiced a concern that the new machine be equipped with the latest safety features. Fred argues, however, that there has never been an injury at the company on the old style equipment. In addition, the old style equipment is considerably less expensive. Following the meeting Joanne meets with other employees and organizes them to prepare a letter to be sent to Fred that outlines their concerns and urges him to purchase the safer binding machine.

Assume that your group is the group of employees who will be sending the letter to Fred. Prepare your letter. Identify the key concerns that your group has. Why is your option better for the company? Why should Fred listen to your group? Etc. etc.

Make sure each person in your small group has an opportunity to make input into the final letter. When everyone is finished making their input, post the final letter for the other groups to see. You will have one week for this task.

When generating online scenarios make sure the situations are familiar, interesting and accessible. Deeper learning and engagement will develop if learners are encouraged to do some research before becoming involved so that discussion is informed and interesting.

The strength of doing these types of activities online is often in the time delay, giving learners time to think through who they are representing, and what this perspective might be. Each activity needs a clear structure – guidelines for online behavior to prevent learners inflaming a discussion, timelines and word limits, a debriefing period, and a "what did we learn" reflective phase.

Using small discussion groups to assist in drawing personal meaning.

The purpose of small discussion group activities should always be to enhance the individual's learning, while contributing to a group process which supports other learners. If designed well, small discussion groups can:

- Reduce the number of postings learners have to work through.
- Add variety to the program.
- Increase the value of participation (provide more input and feedback per learner).
- Help lessen the isolation an online learner feels by creating a small network.
- Promote learner-to-learner interaction with less reliance on the teacher

Of course, if the activity is not worthwhile or well conceived, group work is likely to be frustrating for the learner. There are many practical and simple activities which work well in small groups of 2-5.

- Paired email activities.
- Creation of a plan or a course of action which is presented to the entire class.
- Development of group presentations.
- Pairs of learners working together to better understanding a set of readings.
- Peer review of each other's work.
- Team analysis of a case study.

Level 5 - Reflecting on the Experience

The purpose of any reflective activity is to support learners to review and evaluate their approaches, strategies, knowledge or learning. Typical activities which promote reflection include personal journal or diary writing and reflective statements on learning as part of an activity. To engage learners in reflective conversations is more challenging.

Activity for encouraging reflection.

Working with a partner, share a posting you made early in the course and another you made later. Share and discuss how your ideas have developed, what influenced your thinking, and where you might go to from here. The role of each of you is to challenge, probe, question and support the other partner in coming to their own conclusions about their learning.

You will submit your own 200 word statement at the end of this process.

Suggestions for creating small group reflective activities.

- Share and give peer feedback on a reflective summary of a significant learning experience.
- Following a practical experience, learners share their learning development focus on what happened, why, how they responded, what they learned, what they will do next time.
- A critical incident discussion where learners describe a key incident and as a group attempt to provide some strategies for addressing this (eg. the child threw a chair across the room).
- Share a quote from your journal that is meaningful. Discuss how this quote is significant to you, and what it means for your learning present and future.
- Select one posting from a course discussion that was especially meaningful for you. Share this in your group. Why was it significant? How did it influence you?
- Discuss what process you have been through as a learner and where you feel you now are in the process.
- In your group, reflect on how you might organize this course if you were the teacher.
- Learners examine an assessment activity and some exemplars and suggest what the grading criteria might be. The process of critique and debate could create the framework for the actual grading criteria that learners agree to work to.

Conclusion

Any good course has a deliberate 'shape' to it. There will be a gradual building of the community of learners into a confident, cohesive and supportive group. There will be ebb and flow of workload, of intensity of involvement, and of level of difficulty and challenge. Activities and learner-to-learner interactions provide the scaffolds to facilitate learning while the teacher provides whatever assistance learners need to enable them to engage in learning activities productively.

In this chapter we have deliberately focused on practical activities and examples from real courses to encourage and support learner-learner interaction. We have identified activities which could be used to create different depths and complexities in your course. In addition, the five levels of learner-to-learner interactions can be very useful as a developmental model for creating the structure for a course. A course might start with basic discussion activities focusing on social aspects, a course could move into information sharing activities as learners come to grips with the content. Higher levels of discussion that call for viewpoint-type activities are effective when the level of comfort with the content and the learning environment is established. More complex

collaborative activities rely on learners confidently working together – something that will take time to develop; reflective activities require greater trust, more in- depth knowledge of the content and a willingness to stretch outside the comfort zone – all skills more likely to be evident in later parts of your course. As a course grows, our goal will be to foster positive interdependence among participants - while each unique learner retains a confident independence in themselves as a learner.

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