

Experiential Learning and the Discussion Board

A Strategy, a Rubric, and Management Techniques

Cleo Magnuson

The online discussion board can be a tool that the instructor can use in the Web-enhanced, Web-supported, or the fully online course. The use of this tool and the subsequent activity that occurs on a discussion board can serve as an optimal method to provide experiential learning opportunities for the learner and promote higher order/critical thinking through problem-based learning. A discussion board strategy is outlined that includes the key components to incorporate in a discussion within the online environment. A rubric is included to assist in the assessment of the learner's online discussion posts.



Cleo Magnuson, Instructional Designer, Center for Teaching and Learning, Dreiser Hall, Room 332, Indiana State University, Terre Haute, Indiana 47809. Telephone: (812) 237-7941.
E-mail: extcleo@isugw.indstate.edu

THE DISCUSSION BOARD STRATEGY

Utilizing a discussion board strategy is an efficient way to present a discussion board question, provide an experiential learning opportunity that is problem-based and have students engage in higher order/critical thinking tasks. To accomplish all of this through the use of a discussion board activity, the instructor can employ a strategy. The following steps can be used to guide the instructor:

1. Determine the topic for the discussion board activity based on the content.
2. Determine the goals and objectives to be accomplished: the goals and objectives are tied to the content.
3. Decide what role the instructor will have and what role the learner(s) will have.
4. Determine the methodology or way in which the learner(s) can be engaged in the discussion board activity.
5. Sculpt the question to encourage higher order/critical thinking. Consider providing an experiential learning opportunity within the context of the activity. This question can be problem-based.
6. Consider how the learner(s) might approach the problem/

question posed on the discussion board.

7. Manage the discussion board.
8. Assess the learner's posts.
9. Reflect on the process.
10. Produce and provide any scaffolds that are required.

When designing an online course, whether it will be experiential in nature or not, planning is a key element. As part of the planning process, the instructor will have incorporated sound instructional design principles in both the design and development of the course. The instructor will have clearly-identified the goals for the course as well as the objectives. Specific objectives for the each module/theme and/or week (dependent on how the instructor presents the content) will be based on the overall goals for the course. Inherent in the instructor's plan will also be the methodology to be used when teaching the course. If the instructor wishes to encourage experiential learning, content and activities would be formulated keeping in mind the components of experiential learning. Within the planning process, then, the instructor will have identified how these components would influence the learner.

EXPERIENTIAL LEARNING AND THE DISCUSSION BOARD

So how does the instructor use the discussion board to promote experiential learning? Let us first examine the components of experiential learning which are: Knowledge, Activity and Reflection (Institute for Experiential Learning, 2003). Utilizing these three components, let us look at experiential learning in terms of the learner, beginning first with knowledge, then engagement in an activity and, finally, learner reflection. As part of knowledge acquisi-

tion, the learner first observes and reflects on the content that has been presented. At this point, the learner is in the process of relating the newly-acquired information (new knowledge) to prior knowledge. The learner is then engaged in an activity and is provided with an opportunity that would promote higher-order thinking (generalization and conceptualization of the new concept). Engaging the student in higher-order thinking or critical thinking tasks requires the learner to work at the level of analysis, synthesis or evaluation as identified in Bloom's taxonomy (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956). Finally, after having been engaged in an activity, the learner then reflects and seamlessly integrates the new information into their knowledge system.

But what is needed to mediate this experiential learning process within the online environment so that learning does occur? Muilenburg and Berge (2002) discuss the four types of thinking that promote discussion: critical thinking, higher order thinking, distributive thinking, and constructive thinking. The authors identify that these types of thinking are both hierarchical and interrelated (para. 9) and further reflect that "The level of student thinking is directly proportional to the level of questions asked" (para. 12).

EXPERIENTIAL AND PROBLEM-BASED LEARNING

Question construction becomes a critical element within any discussion and particularly in the asynchronous online discussion. When the instructor is incorporating experiential learning activities and wishes to encourage higher order/critical thinking, then the presentation of carefully crafted real-world problems may work toward this

end. Through the presentation of real-world problems in the context of problem-based learning, the instructor can provide opportunities for experiential learning. Question construction can focus on real-world problems that promote higher-order thinking and which, by their very nature, do not have cut-and-dried answers. Furthermore, these problems require students to come to consensus on solutions to the problem/topic presented. These real-world problems allow the learner to use acquired knowledge, participate in an activity to promote higher order thinking and, finally, engage in reflection. Additional benefits are also seen. Abdullah (1998) reflects that in problem-based learning in language instruction, students learn skills such as listening, reading, writing, and speaking and, in actuality, "they construct an understanding of language as it is used in real-world contexts" (para 2).

THE DEVELOPMENT OF A DISCUSSION BOARD STRATEGY

So let's reflect on what the instructor would have accomplished at this point through the use of the discussion board strategy. The instructor would have formulated the goals and objectives for the activity, identified a problem-based topic and determined a question that encourages experiential learning and is based on a real-world situation. In addition, the instructor would have decided on both the instructor's and learners' roles and defined the methodology or the way in which the learners would work to answer the question (group/individual).

Morrison, Ross, and Kemp (2001) discuss a variety of ways in which the learner can be engaged in a discussion: instructor-led, group work, panel discussion, case study, and

role playing, to name a few. These same formats can be applied to the discussion board activity also, including response to a guest speaker, participation in a focus group, and individual postings. When we also consider the types of interactions discussed by Moore and Kearsley (1996), we see that a well-designed discussion board activity can encourage student-to-student, faculty-to-student, and student-to-content interaction.

Now that the instructor has defined the methodology (format in which the students will work and post), the discussion board question can be presented. The instructor would tie the question to the content so that contextually the learner could begin to make connections between prior knowledge and the newly acquired knowledge. These connections and engagement in the activity are part of the process of determining the response to the question posed.

THE LEARNER

The learner must now engage in a process to meet the requirements of the question: effectively answering the question before posting to the discussion board. By adapting Savery and Duffy's (1995) model as discussed in Abdullah (1998), the learner working in a group along with the members of the group might employ a strategy that includes determining possible solutions to the question, determining the information and resources relevant to the problem and then make assignments for information gathering. Once all of the information had been brought together and reviewed, possible solutions would be generated. If, on reflection, the learners determined they still needed more information in order to answer the question, certain steps would be revisited. The group's answer to the question/scenario/

case would then be posted to the main discussion board and a group designated moderator(s) or all members of the group would then lead/participate in the classroom discussion. For some student groups, the process to engage in may be transparent, but it is wholly possible that some student groups may need guidance as to how to begin to answer the discussion board question. Savery and Duffey's (1995) model in Abdullah (1998) provides a logical process for the instructor to use when assisting the learners.

In the online environment, the learner must find ways to communicate with other learners working together as a group to answer the discussion board question. The use of technologies can be the learner's resource to accomplish this. Some course management systems (CMS) provide a way in which group discussion boards can be set up (by the instructor) to act as a private meeting place (asynchronously) for the group. If this is not available, the instructor can encourage students to communicate by e-mail and/or use the chat feature and meet in a designated chat room where (if possible) the chat can be archived. Archiving the chat can be valuable for both the learner and the instructor. Some stand-alone software, such as NetMeeting, allows chats to be saved. Furthermore, an archived chat can be useful to both the learner and the instructor as a record of who participated as part of the group and who did not. Additionally, the instructor can review the archive to check the process that the learners are using to answer the question and determine if any additional assistance is needed.

To encourage participation by all members of the group, the instructor may wish to incorporate an assessment process that addresses group participation. For example,

journaling by each participant in the group can chronicle his or her involvement in the group project, or a peer evaluation form generated by the instructor can be completed by each group member.

MANAGING THE ONLINE DISCUSSION BOARD

Management strategies employed by the instructor may be dependent upon the way in which the task for the discussion board activity has been structured. For example, the management of group and individual postings may differ somewhat.

There are a number of ways that the instructor can have students who are formulating a group response post to the board. The instructor may have the group formulate and post only a single response to the instructor's question. Each group member, however, may be required to serve as moderator for one day during the week that the group response is posted. The instructor's role in this case would become one of being a facilitator redirecting the class discussion as necessary. A role-playing activity, panel discussion, or case study can also be conducted by dividing students into groups.

The instructor may choose to present a question and require individual responses to be posted to the board. Individual posting may generate a great many posts. The instructor may choose to moderate the board and respond to some of the posts versus all of the posts. Redirection and refinement may be necessary as the discussion activity progresses. At the end of the activity, the instructor may choose to summarize the key concepts brought forth as a result of the discussion board activity or designate a student to do so.

Stating clearly the posting requirements for the activity should

assist the student in knowing what frequency of response is required. To encourage participation in the discussion board activity, points may be assigned just as they would be to any other assignment given within the course. Additionally, since the instructor is seeking a rich discussion that encourages higher-order thinking and critical thinking, the frequency of the post should be designated. Requiring the learner to post only one time to the board may not provide a rich interaction between the learners and the development of a community of learners. The key element in the discussion board activity is having students return frequently to the board to agree/refute or address additional issues that are tied to the content and the discussion board question.

ASSESSING THE DISCUSSION BOARD ACTIVITY

Clear goals and objectives for the discussion board activity as well as a posted rubric may assist the learner in identifying what needs to be done and what is considered an appropriate response. The instructor may choose to include the rubric within the course syllabus.

When assessing the learner's post(s), the following components are critical elements within the context of encouraging higher order thinking: quality of the posts, evidence of reflection and evaluation (Land & Dornisch, 2001/2002), relating new information to prior knowledge, constructive responses to the posts of others, and refuting/agreeing with supporting references included. Spelling/grammar and the frequency of response by the learner also contribute to the quality of the post and the degree to which the student is engaged and reflecting on his or her own statements and those of peers and/or the

instructor. All of these elements are part of the "Components of the Rubric," as seen in Table 1, Rubric for the Discussion Board.

The learner's post can be "Below Baseline," "Engaged," "Emerging," or "Exemplary" in response to each of the rubric components. A maximum score of 21 can be attained. Each component is assessed individually to determine at what level the student is performing with regard to that element.

INSTRUCTOR REFLECTION

Just as the instructor would reflect on what worked and what did not in the face-to-face classroom, so too in the online environment reflection becomes important. Table 2, in a general manner, identifies what a discussion board should look like versus what it should not look like.

SCAFFOLDS FOR LEARNING

After reviewing the results of the activity, the instructor may determine that specific pieces of information did not seem to have been assimilated by the students, based on the content given. It is at this point that the instructor may begin to identify that scaffolds are needed. Before exploring the various types of scaffolds, let us first visually define the term *scaffold*.

Initially, when we think about scaffolds, a picture of a construction site may come to mind. At the construction site, there may be many scaffolds constructed to support workers so that they can complete the construction tasks. So too, in the online learning environment we want to put in place these support systems so that students who did not acquire the information through the teaching process can now do so (Bull et al., 1999).

The instructor may build the following types of scaffolds: tutorials

with print screens and/or additional files that expound further on various concepts. These file types could include audio, video and/or Microsoft Office files (MS Power Point, MS Word, MS Excel) and/or Flash movies. A list of readings and resources may become a scaffold. Alternative technologies may also be viewed as scaffolds such as e-mail, phone, fax, the discussion board and linked help screens which are located within course management systems.

SUMMARY

The discussion board strategy is an effective way for the instructor teaching a fully online or a Web-enhanced course to provide opportunities for students to engage in critical thinking with their peers. Before this interaction can occur, however, the instructor must carefully plan the activity. Planning, goals and objectives, question construction, and methodology will influence the richness of the discussion. To encourage higher order/critical thinking the instructor may wish to incorporate a real-world experience, keeping in mind the components of experiential learning and how this interplays with problem-based learning.

Once the instructor launches the discussion board activity and the methodology to be used (group work/ individual posting), management strategies may need to be employed. The instructor may choose to also incorporate a peer evaluation component or a journal assignment in which the student chronicles his or her individual contribution to the project when students are working as part of a group.

Once the discussion postings have begun by the group or by individuals depending on the assigned task, the instructor will begin to monitor the discussion. The instruc-

Table 1. Rubric for Discussion Board

Components	Below Baseline	Engaged	Emerging	Exemplary
Quality of posts	Related to topic/ largely fact based	Limited understand- ing of problem but some analysis.	Adequate under- standing of problem although analysis, synthesis evaluation is limited.	Clear analysis, syn- thesis and evalua- tion.
Evidence of varied levels of reflection (Land & Dornisch, 2001/02)	No reflection ¹	Response shows postings have been read.	Recognition of multi- ple perspectives ² .	Extension and refine- ment of perspectives ³ .
Related new info to prior knowledge	No reference to prior knowledge.	Attempt but it is weak/limited.	Postings reflect prior knowledge related to new info but no evi- dence of integration of new content.	Prior knowledge is actively referenced and clearly relates to problem. Evidence of integration of new content.
Constructive response to other's ideas	No response.	Recognition of other's opinions but no evaluation of these.	Recognition of other's opinions but limited evaluation.	Recognition of other's opinions with examples of analysis/ synthesis of those opinions.
Evidence of support for opinions	No references/stud- ies cited in support of statements made.	Attempt to reflect on literature but not clearly stated.	Limited evidence of review of literature but attempt is clearly stated.	Clear cut evidence of critical review of lit- erature that is cor- rectly cited.
*Regularity of post- ings	Response to question but no response to other's posts.	Response to question and responded to 1 other post.	Response to question and responded to 2 other posts.	Response to ques- tion and responded to 4 -5 other posts.
**Mechanics of post- ings	Poor sentence struc- ture and organiza- tion with frequent spelling/grammati- cal errors.	Complete sentences but could improve on organization; has 3 spelling/grammati- cal errors.	Complete sentences but could improve on organization; has 1-2 spelling/gram- matical errors.	Complete sentences, well thought out organization. No spelling or grammati- cal errors.

Dependent on the instructor's grading schema, points may apply to each of the 4 levels: Below Baseline (0), Engaged (1), Emerging (2), and Exemplary (3). Maximum score with this applied rubric would then be a score of 21.

*Regularity of postings: Frequency of postings may be dependent on length of period available to respond: Instructor preference.

**Mechanics of posting: Grammar, spelling and organization.

Definitions based on Land and Dornisch (2002).

¹ No reflection: Student did not show evidence of having read or responded to any postings.

² Recognition of multiple perspectives: Students identify and recognize how a posting has similarities and differences from another's but do not elaborate or explain.

³ Extension and refinement of perspectives: Students recognize how a posting(s) has similarities and differences from another perspective and elaborate with personal anecdote, experience, and/or opinions/conclusions. Dependent on the question presented by the instructor, the student's posting may reflect how the idea extended or promoted further advancement of the initial idea.

tor must become adept at knowing when to break in to the discussion and when to step back and let the discussion evolve.

The rubric reflects the requirements for the activity and how the instructor will evaluate the posts. Including the rubric within the syl-

labus may be an effective way to assist students in knowing what is required of them. After the student's work has been graded, the

Table 2. What Should the Discussion Board Look Like?

Like This!	Not like this!
• Clear topic: goals/objectives/relate to content. • Open ended questions. • Reflective questions. • Informed discussion: I learned something from this. • Has direction: focus/re-direction. • Summary.	• Closed questions. • Rambling discussion. • No re-direction. • No netiquette/ flaming. • Certain students monopolize the discussion. • No summary.

student can then review the goals and objectives to determine where it is that he or she was successful or unsuccessful, as the case might be. The course goals stated in the syllabus and the objectives for the discussion board task itself can again become a guide to the student as to the information that may require further review.

It is also important that the instructor reflect upon the discussion board activity once it has been completed to identify where the students are having difficulty or where they were successful. If specific difficulties were observed, the instructor can determine if scaffolds are needed and then provide those as a follow up. Thus, the implementation of the discussion board strategy becomes an effective tool for teaching and learning.

REFERENCES

- Abdullah, M. H. (1998). *Problem-based learning in language instruction: a constructivist method*. Retrieved September 2, 2004, from ERIC Digest, ERIC Clearinghouse on Reading, English, and Communication Digest #132, Article # ED0-CS-98-5 Nov 1998. <http://www.indiana.edu/~reading/ieo/digests/d132.html>
- Bloom, B. S., Englehart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (Eds.). (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook 1: Cognitive domain*. New York: Longmans, Green.
- Bull, K. S., Shuler, P., Overton, R., Kimball, S., Boykin, C., & Griffin, J. (1999). *Processes for developing scaffolding in a computer mediated learning environment*. ERIC Document Reproduction Service Number ED429765. Institute for Experiential Learning. (2003). *Experiential learning*, Washington, DC. Retrieved March 18, 2003 from http://www.ielnet.org/exp_learning.html
- Land, S. M., & Dornisch, M. M. (2001/2002). A case study of student use of asynchronous bulletin board systems (BBS) to support reflection and evaluation. *Journal of Educational Technology Systems*, 30(4), 365-377.
- Moore, M. W., & Kearsley, G. (1996). *Distance education: A systems view*. Belmont, CA: Wadsworth.
- Morrison, G., R., Ross, S. M., & Kemp, J. E. (2001). *Designing effective instruction* (3rd ed., pp. 193-196). New York: Wiley.
- Muilenburg, L., & Berge Z. L. (2002, March). A framework for designing questions for online learning. Retrieved October 10, 2003 from <http://www.emoderators.com/moderators/muilenburg.html>

YOUR ADVERTISEMENT OR ANNOUNCEMENT COULD BE HERE

CONTACT KATHY CLEMENS
USDLA

8 WINTER STREET, SUITE 508

BOSTON, MA 02108

800-275-5162

KCLEMENS@USDLA.ORG