

## Seven Strategies for Plagiarism-proofing Discussion Threads in Online Courses

**Melissa R. Olt**

Strayer University Online  
Frederick, MD 21702 USA  
[Melissa.olt@strayer.edu](mailto:Melissa.olt@strayer.edu)

### Abstract

Online discussions are an integral part of distance education courses. They provide a means for interaction among students and the instructor about course content as well as an opportunity for students to develop critical thinking skills. A growing number of faculty, however, have expressed concern about plagiarism occurring in online discussions. Rather than instructors policing discussion threads and then engaging in the time-consuming process of documenting occurrences of plagiarism, this paper considers whether it is possible to deter plagiarism of discussion threads through design and facilitation. Seven strategies for plagiarism-proofing online discussion threads are presented.

**Keywords:** Asynchronous, design, facilitation, distance education, interaction

According to Wu and Hiltz (2003), online discussions have an important function in distance learning courses. They provide an “avenue through which the learner[s] can take an active role in the learning process” (Larkin-Hein, 2001, p. F2G-6) through peer-peer and learner-instructor interaction about course content. Online discussions usually require that students write their initial responses to a given prompt or discussion question and then engage in a written conversation by responding to each other’s postings. This written dialogue that occurs within an online discussion, “in theory, helps more students learn better by placing them in an intellectual environment that encourages active, thoughtful, and equal participation from all comers” (Althaus, 1997, p. 158). Based on the results of various studies concerning the role of online discussions in student learning (Althaus, 1997; Hein & Irvine, 1998; Larkin-Hein, 2001; Swan et al., 2000; Thomas, 2002), the hypothesis appears to be valid.

Online discussions have many advantages over face-to-face discussions. Bradley, Thom, Hayes, and Hay (2008) catalogued many of them from various sources, including “convenience and flexibility of access, increased reflection time for posts, less intimidating context for introverted students and increased number of discussion comments” (p. 889). Logically, it would seem that the increased reflection time for posts would lead to a higher quality discussion. Furthermore, since all students are required to participate in online discussions, one might conclude that the conversation would be richer. Unfortunately, that may not always be the case. Since online discussions are a form of writing, there is always the possibility of plagiarism. The focus of this paper is to explore design and facilitation strategies that will help to deter plagiarism in online discussion threads.

### Plagiarism in Online Discussion Threads

One kind of plagiarism that Olt (2007) first documented and described as “unique to the online mode of course delivery” (p. 127) is plagiarism in asynchronous discussion threads. Although there are no known studies documenting the prevalence of such plagiarism, informal queries of online faculty from various institutions as well as this author’s personal experience facilitating online courses confirm that it is a concern. One instructor commented: “I am finding [plagiarism in online discussions] with an alarmingly increasing frequency” (Personal communication, March 6, 2009). Not only did faculty report plagiarism in student initial postings to the discussion questions but also in student response postings to each other. One faculty discovered that a 639-word discussion posting had been plagiarized from four different Internet Websites. Another found that a student had “[copied] another student’s DQ response word for word. The student even threaded her response directly under the original author, twice . . .” (Personal

communication, March 22, 2009). Such plagiarism renders it impossible to determine how much learning, if any, has taken place for that student.

Moreover, a cursory Internet search offers further proof that plagiarism in asynchronous discussion threads is an issue worth addressing. Websites such as StudentofFortune.com ([www.studentoffortune.com](http://www.studentoffortune.com)) provide students with a venue to purchase answers (the website euphemistically refers to them as tutorials) to discussion questions for specific courses. One such tutorial for two discussion questions for a course offered by a well-known online institution has been purchased seven times and is on sale again for \$10.00. With such a clear-cut example of intentional plagiarism, faculty and administration are left wondering what can be done. Rather than investing energy into the time-consuming and tedious process of policing online discussion postings, however, it might be a more productive and less frustrating use of time to consider how online discussion questions might be written and facilitated to deter plagiarism.

### Strategies for Plagiarism-Proofing Discussion Questions

In 2007, Olt published her doctoral research, which presented an instructional design model to deter plagiarism in online courses. The model was developed based on the findings of “a narrowly focused literature review to identify any factors mediating plagiarism as well as any purported remedies” (p. 61). The final version of the model outlined its goals, preconditions, and values. The model’s key elements were eight methods, with corresponding strategies, to deter plagiarism in online courses. According to Olt, the model should function as an intact model, meaning that course designers “should select as many strategies as practicable under each method given. . .” (p. 109). The model, however, did not address specifically how to design asynchronous discussions to deter plagiarism. In considering the matter, several questions come to mind:

1. Which kinds of discussion questions are most effective at deterring plagiarism?
2. How many discussion questions should a course have?
3. How frequently should students be required to participate in online discussions?
4. How frequently should instructors be required to participate in online discussions?
5. How should student online discussion posts be assessed?

These are important questions and will be addressed in presenting strategies for plagiarism-proofing discussion threads in online courses.

Strategy 1: Ensure that discussion questions encourage higher-order thinking skills.

One of the proposed strategies in the Olt (2007) model was to “create assignments that require students to utilize critical analysis and higher-order thinking skills” (p. 172). Other scholars (Hamalainen, 2007; Johnson, 2004; Scribner, 2003) agree that this is an effective means to reduce plagiarism. When written assignments require that students think critically, utilize higher-order thinking skills, or “present an argument or persuade the reader, they simply cannot cut and paste their way to a final project” (Hamalainen, 2007, p. 41). As an example, Hamalainen described an assignment in which “students were asked to choose three poems from three different anthologies to create their own minianthology. They were then asked to write about why and how these poems were chosen” (p. 41). Such an assignment is so creative, unique, and focused on higher-order thinking skills that, as Hamalainen concludes, plagiarism is nearly impossible.

While critical and higher-order thinking is certainly an achievable goal for online discussions (Bradley et al., 2008; MacKnight, 2000; Thomas, 2002), the findings from recent research studies suggested that the opposite is occurring. As a case in point, a research study conducted by Garrison, Anderson, and Archer (2001) found that only 17% of the student discussion responses posted reflected higher-level thinking skills. In another study, Gilbert and Dabbagh (2005) found that “16-26% of online student postings were higher-order thinking, as defined by levels of Bloom’s Taxonomy” (as cited in Bradley et al., 2008, p. 889). Although there seems to be an upward shift in percentages from 2001 to 2005, the results are still somewhat discouraging. They do, however, indicate which area designers and instructors need to focus on.

If discussion questions that encourage higher-order thinking skills deter plagiarism, then which kinds of discussion questions would be most effective? In 2008, Bradley et al. conducted a study that “examined whether different question types influenced the quantity and quality of students’ online submissions in an undergraduate Child Development course” (p. 890). In particular, one of the three research questions focused on which question types would be more likely to generate higher-order thinking skills in student online discussion responses. The study concluded that “If the learning goal is to facilitate students’ level of higher-order thinking, then the course link, brainstorm and direct link questions would work best” (Bradley et al., 2008, p. 899).

Course link questions require that students link a specific course concept with another source. The following is an example of a course link question:

Please read the following excerpt taken from Chapter 12 of *Alice in Wonderland*. What kind of logical fallacy does the King make? Explain your answer.

In the example above, the course concept of logical fallacies is linked with an excerpt from a chapter of *Alice in Wonderland*. Such a question requires that students 1) know what a logical fallacy is, 2) analyze the excerpt to identify an example of a specific logical fallacy, and 3) explain how their selected text is an example of that fallacy.

Brainstorming discussion questions are “structured to generate any and all ideas or solutions to an issue” (Bradley et al., 2008, p. 890). This technique is also useful in response postings when trying to elicit more information from students. The following is an example posting of an instructor to a student response:

In your response to X, you noted that he made a good topic choice. Why do you think that is so? What makes an excellent topic choice? If we were to create a list of necessary qualities, what would they be? Class: I'll begin, but anyone may add to our list. Be sure to give a reason for the quality that you list. Here we go . . . 1. Interest or relevance to the author - If the topic is of interest or relevance to the author, it will be easier to write about. 2. ?

The above example pushes students to think more deeply about what makes a good topic.

Finally, direct link questions “referred to a specific aspect of [an] article, and asked students for their interpretation or analysis” (Bradley et al., 2008, p. 890). The following is an example of a direct link question, also taken from Chapter 12 of *Alice in Wonderland*:

“If you didn't sign it,' said the King, `that only makes the matter worse. You must have meant some mischief, or else you'd have signed your name like an honest man.” Explain how this quotation from Chapter 12 of *Alice in Wonderland* is an example of a Catch 22. What would have happened had the knave signed the letter?

Direct link questions have the virtue of directing students toward the correct answer while still pushing them to work out the details on their own.

Strategy 2: Relate discussion questions to the course as a whole.

The learning gleaned from an online discussion should contribute in some way to the successful completion of a future course assignment. Benfield (2002) stressed the importance of ensuring that student discussion submissions have some “useful advantage” (p. 3). Assignments that are unique, meaningful, and have value beyond its mere completion are effective deterrents of plagiarism (McLafferty & Foust, 2004; Willen, 2004). If students see their work on discussions as an investment in a future assignment, it stands to reason that they will be more likely to put forth more effort in completing them. According to Malouff and Sims (1996), students are less likely to plagiarize if they “expect ethical writing to lead to personally important benefits” (Abstract section, ¶ 1). To illustrate, the knowledge gleaned from the course link and direct link discussion question examples provided in Strategy 1 could possibly contribute to a persuasive paper assignment in which students would be required to develop a logical argument and avoid logical fallacies.

Strategy 3: Rotate the curriculum.

In order to prevent students from recycling and/or selling answers to discussion questions, as in the case of StudentofFortune.com, it is important to rotate the discussion prompts each term (Born, 2003; Olt, 2007; VanBelle, n.d.). Not only does rotating the curriculum help to prevent plagiarism, but it also helps instructors to detect it more easily. As a case in point, one faculty recounted that a student had submitted discussion question responses that answered questions from the previous iteration of the course. Apparently the student had not even noticed that the questions had changed.

Strategy 4: Encourage interactivity.

According to Wu & Hiltz (2003), interactivity is a key component in the online mode of course delivery and is accomplished through online discussion threads. For successful learning to take place, students need to interact with their instructor, with each other, and with course content (Barbour & Collins, 2004; Moore & Kearsley, 1996). When designed and facilitated properly, asynchronous discussions provide the opportunity for all three kinds of interaction to occur together. Research conducted by Swan et al (2000) found that this threefold interaction positively influences student perception of learning. Furthermore, interaction in online courses is an effective strategy for overcoming the isolation or alienation that some students may otherwise feel (Belanger & Jordan, 2000). Positive student-student and student-instructor interaction helps to build rapport and trust among course participants. In the findings of a study conducted by Vonderwell, Liang, & Alderman (2007), one participant wrote:

Asynchronous discussions play a vital role in the learning that takes place in an online course. In order for a discussion to be effective and for learners to feel comfortable sharing their opinions with a group they may not know, it is necessary for a sense of community to be built first. Participants should be allowed to get to know one another (through icebreakers, etc.) (p. 317).

Creating a “sense of community” and building a positive rapport as well as mutual trust among participants are effective deterrents of plagiarism (Ashworth & Bannister 1997; Ashworth, Freewood, & MacDonald, 2003; Born, 2003; Carroll & Appleton, 2001; McLafferty & Foust, 2004). In a recent study, Mandernach, Forrest, Babutzke, and Manker (2009) concluded that “the key to promoting students’ critical thinking seems to lie with instructor interactivity” (p. 54), and critical thinking skills have already been identified as a remedy to plagiarism.

Strategy 5: Ensure that instructors take an active role in online discussions.

Undoubtedly, instructors play an important role in the success of online discussions (Olt, 2007; Wu & Hiltz, 2003). While according to Thomas (2002), online discussions have the potential to encourage student critical thinking, it is the instructor that must be “powerful in triggering discussion and facilitating high levels of thinking and knowledge construction” (Garrison & Cleveland-Innes, 2005, p. 137). To accomplish this, MacKinght (2000) suggested that instructors engage students through a Socratic line of questioning. A further consideration is student perception of the instructor. Negative impressions are a mediator of plagiarism (Kerkvliet & Sigmund, 1999; McCabe & Trevino, 1997; Underwood & Szabo, n.d.).

With this in mind, how frequently should instructors participate in online discussions? Unfortunately, there is not a way provide a quantified answer. It is possible, however, to detail the minimum facilitation requirements:

1. Answer any direct question posed by a student.
2. Intervene to clarify an issue.
3. Redirect when discussions go astray.
4. Ask probing questions to encourage students to think more deeply about course concepts.
5. Introduce new ideas, insights, or resources when discussions are stifled to encourage further discussion.

Such facilitation requirements are based on well-known best practices for online facilitation and are necessary here because they build a sense of community and trust, encourage interactivity, and promote higher-order thinking skills, all of which deter plagiarism.

**Strategy 6:** Ensure that the workload is manageable.

One consideration in online discussions is workload manageability. Depending on the number of students and the number of required response postings, one active discussion has the potential to generate more than a hundred messages. This can make students feel overwhelmed and less likely to read through them. In the Vonderwell, Liang, & Alderman (2007) study, one participant commented:

If the discussions aren't repetitive or there aren't too many, then most students can and are willing to keep up [with the postings]. When the discussion becomes too large or takes place too frequently, I get bored, and I've seen others step back and do the minimum amount of work (p. 315).

Furthermore, the more messages generated, the more likely it is that some students will not receive a response to their posting. This can make students feel alienated. Perceived alienation, disinterest, and an unmanageable workload mediate plagiarism (Carroll, 2000; McMurtry, 2001; Olt, 2007). While it is not possible to quantify the ideal number of discussion questions for an online course, it is important to keep in mind workload manageability. Ideally, students should be required to post an initial response to a given discussion question and then respond substantively to other student postings.

**Strategy 7:** Assess discussions and provide feedback.

According to Russell et al., the online learning environment “enables assessment to contribute to learning – through its potential to support collaborative learning, and through facilitating high quality feedback between teachers and students” (p. 495). There are essentially two kinds of feedback: formative and summative. The purpose of formative feedback is to modify instruction as it is occurring to improve student learning (Black & William, 1998). Formative feedback provided by the instructor within the discussion forum itself serves to guide students to a deeper understanding of course content and higher-order thinking, which has already been identified as a deterrent to plagiarism, as well as provide a means for instructors to address any student misconceptions. Another advantage of such feedback is that it focuses on the learner and, therefore, “can encourage meaningful dialogue, increase collaboration, peer and self-evaluation, and a sense of community for a shared purpose” (Vonderwell, Liang, & Alderman, 2007, p. 310). Such outcomes have already been identified as deterrents to plagiarism (Born, 2003; James, McInnes, & Devlin, 2002; Hutton, 2006; Olt, 2007).

**Conclusion**

Plagiarism is undoubtedly a serious concern in higher education, but when it infiltrates a major component of distance education, online discussions, it becomes even more pressing. Although the need for policing for plagiarism will never completely go away, there is much that can be done in the design and facilitation of online discussions to minimize occurrences of plagiarism. This paper has presented seven such strategies. While many of the strategies discussed in this paper may perhaps be considered common knowledge, the paper did link current research on asynchronous online discussions has been linked to current research on plagiarism. That juncture increases the probability that the proposed strategies will result in the desired effect. Furthermore, the strategies discussed in this paper are put forth as an intact model specifically for online discussions. In other words, it is recommended that all seven strategies be implemented simultaneously to have the most impact. Finally, specific guidance has been offered on the structure and facilitation of online discussions such as which kinds of discussion questions would be most effective at deterring plagiarism.

Clearly, there is much need for further research on plagiarism in online courses. First, quantitative studies should be conducted to determine the overall prevalence of cheating in the online mode of course delivery. Then more specific studies such as occurrence of plagiarism within online discussion threads should be conducted. Finally, it is recommended that the strategies presented in this paper be tested to evaluate their overall effectiveness. Plagiarism is a big problem, but instructors do have recourse – seven strategies for plagiarism-proofing their online discussion threads.

## References

- Althaus, S. (1997, July). Computer-mediated communication in the university classroom: an experiment with on-line discussions. *Communication Education*, 46, 158-174.
- Ashworth, P., & Bannister, P. (1997). Guilty in whose eyes? University students' perceptions of cheating and plagiarism in academic work and assessment. *Studies in Higher Education*, 22(2), 187-203. Retrieved March 23, 2006, from Academic Search Premier database.
- Ashworth, P., Freewood, M. & Macdonald, R. (2003). The student lifeworld and the meaning of plagiarism. *Journal of Phenomenological Psychology*, 34(2), 257-278.
- Barbour, M. K, & Collins, M. A. J. (2004). Paper presented at the 27<sup>th</sup> Association for Educational Communications and Technology, Chicago, IL. Retrieved March 22, 2009, from Eric online database.
- Belanger, F., & Jordan, D. H. (2000). *Evaluation and implementation of distance learning*. Hershey, PA: Idea Group Publishing.
- Benfield, G. (2002). Designing and managing effective online discussions. Oxford Centre for Staff and Learning Development. Retrieved on March 16, 2009, from [http://www.psychology.heacademy.ac.uk/docs/pdf/p20030613\\_benfield-online\\_discussions0.pdf](http://www.psychology.heacademy.ac.uk/docs/pdf/p20030613_benfield-online_discussions0.pdf)
- Born, A. D. (2003). How to reduce plagiarism. *Journal of Information Systems Education*, 14(3), 223. Retrieved March 17, 2006, from Proquest database.
- Black, P. & William, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80(2), 139-148.
- Bradley, M. E., Thom, L. R. Hayes, J. & Hay, C. (2008). Ask and you will receive: How question type influences quantity and quality of online discussions. *British Journal of Educational Technology*, 39(5), 888-900.
- Carroll, J. (2004). Deterring, detecting and dealing with plagiarism: A brief paper for Brookes staff for integrity week. Retrieved February 8, 2006, from [http://www.brookes.ac.uk/services/ocsd/2\\_learnth/plagiarism.html](http://www.brookes.ac.uk/services/ocsd/2_learnth/plagiarism.html)
- Carroll, J., & Appleton, J. (2001). *Plagiarism a good practice guide* [Electronic version]. Oxford: Oxford Brookes University.
- Garrison, D. R. & Cleveland-Innes, M. (2005). Facilitating cognitive presence in online learning: Interaction is not enough. *The American Journal of Distance Education*, 19, 3, 133-148.
- Garrison, D. R., Anderson, T. & Archer, W. (2001). Critical thinking, cognitive presence and computer conferencing in distance education. *The American Journal of Distance Education*, 15, 1, 7-23.
- Gilbert, P. K. & Dabbagh, N. (2005). How to structure online discussions for meaningful discourse: a case study. *British Journal of Educational Technology*, 36, 1, 5-18.
- Hamalainen, M. (2007, March). Useful tips on avoiding plagiarism. *Library Media Connection*, 25(6), 40-41. Retrieved May 31, 2009, from Academic Search Premier database.
- Hein, T. L. & Irvine, E. S. (1998). Assessment of student understanding using on-line discussion groups. *Proceedings from the Frontiers in Education Conference*, Tempe, AZ: 130-135.
- Hutton, P. A. (2006). Understanding student cheating and what educators can do about it. *College Teaching*, 54(1), 171-176.
- James, R., McInness, C., & Devlin, M. (2002). *Assessing learning in Australian universities*. Center for the Study of Higher Education: University of Melbourne.
- Johnson, D. (2004). Plagiarism-proofing assignments, *Phi Delta Kappan*, 85(7), 1-5.

- Kerkvliet, J., & Sigmund, C. L. (1999). Can we control cheating in the classroom? *Journal of Economic Education*, 30(4), 331–351.
- Larkin-Hein, T. (2001). "On-Line Discussions: A Key to Enhancing Student Motivation and Understanding?" Proceedings from the 31st ASEE/IEEE Frontiers in Education Conference. Reno, NV: F2G-6 to F2G-12.
- MacKnight, C. (2000). Teaching critical thinking through online discussions. *Educause Quarterly*, 4, 38-41.
- Malouff, J. M., & Sims, R. L. (1996). Applying an employee-motivation model to prevent student plagiarism. *Journal of Education for Business*, 72(1), 58–62. Retrieved January 26, 2006, from Academic Search Premier database.
- Mandernach, B. J., Forrest, K. D., Babutzke, J. L., & Manker, L. (2009). The role of instructor interactivity in promoting critical thinking in online and face-to-face classrooms. *Journal of Online Learning and Teaching*, 5(1), 49-62. Retrieved June 9, 2009, from [http://jolt.merlot.org/vol5no1/mandernach\\_0309.pdf](http://jolt.merlot.org/vol5no1/mandernach_0309.pdf)
- McCabe, D. L., & Treviño, L. K. (1997). Individual and contextual influences on academic dishonesty: A multicampus investigation. *Research in Higher Education*, 38, 379–396.
- McLafferty, C. L., & Foust, K. M. (2004). Electronic plagiarism as a college instructor's nightmare—prevention and detection [Electronic version]. *Journal of Education for Business*, 80(3), 186–189.
- McMurtry, K. (2001, November). E-cheating: Combating a 21st century challenge. *THE Journal Online: Technological Horizons in Education*. Retrieved July 29, 2006, from <http://www.thejournal.com/articles/15675>
- Moore, M. G. and Kearsley, G. (1996). Distance education. A systems view. Belmont, CA: Wadsworth.
- Olt, M. R. (2007). A new design on plagiarism: Developing an instructional design model to deter plagiarism in online courses. *Dissertation Abstracts International*, 68 (09). (UMI NO. 32776510). Also available at: [http://jolt.merlot.org/vol5no2/Olt\\_dissertation.pdf](http://jolt.merlot.org/vol5no2/Olt_dissertation.pdf)
- Russell, J., Elton, L., Swinglehurst, D., & Greenhalgh, T. (2006). Using the online environment assessment for learning: A case study of a web-based course in primary care. *Assessment & Evaluation in Higher Education*. 3(4), 285-297.
- Scribner, M. E. (2003, February). An ounce of prevention: Defeating plagiarism in the information age. *Library Media Connection*, 32–36.
- Swan, K., Shea, P., Fredericksen, E., Pickett, A., Pelz, W. & Maher, G. (2000). Building knowledge, building communities: consistence, contact and communication in the virtual classroom. *Journal of Educational Computing Research*, 23, 4, 389-413.
- Thomas, M. J. W. (2002). Learning within incoherent structures: the space of online discussion forums. *Journal of Computer Assisted Learning*, 351-366.
- Underwood, J., & Szabo, A. (n.d.). Plagiarism: Is this a problem in tertiary education. Retrieved March 26, 2009, from <http://www.jiscpas.ac.uk/images/bin/underwoodtertiary.pdf>
- Van Belle, G. (n.d.). How cheating helps drive better instruction. Retrieved March 25, 2009, from <http://www.plagiarized.com/vanb.html>
- Vonderwell, S., Liang, X., & Alderman, K. (2007, spring). Asynchronous discussions and assessment in online learning. *Journal of Research on Technology in Education*, 39(3), 309-328. Retrieved June 1, 2009, from Academic Search Premier database.
- Willen, M. S. (2004). Reflections on the cultural climate of plagiarism. *Liberal Education*, 90(4), 55–58.

Wu, D. & Hiltz, S.R. (2003). Online discussions and perceived learning. Paper presented at the Ninth Americas Conference on Information Systems, Tampa, FL. Retrieved on March 16, 2009 from [http://www.alnresearch.org/Data\\_Files/articles/full\\_text/wu\\_Hiltz\(2003\).pdf](http://www.alnresearch.org/Data_Files/articles/full_text/wu_Hiltz(2003).pdf)

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Manuscript received 27 Mar 2009; revision received 1 Jun 2009.



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