

Final Report 6.30.09

Title: Reflection: A Comparison of Facilitated Face-to-Face discussion and Blog Entries to Enhance Student Learning

Project Category: Scholarship of Teaching and Learning

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1. Brief description: Our project was a multi-institutional study to compare the writing, participation and experience of students who complete required reflections using a written and facilitated small group discussion format, to those who complete the same assignment using a faculty-moderated blog. Our collaborators were at George Washington University School of Medicine. Comparisons included survey of student self-reported experience and perceived learning; qualitative analysis of written reflections and blogs focusing on theme and depth of reflection. We collected feedback from faculty participating regarding their experiences and time spent as well. There were no significant changes in our objectives or strategies during the study period.
2. Students were assigned to group via random or convenience samples (based on site) and half participated in each arm. One clerkship block at each site was used as a pilot to test blog structure, and samples of those writings were used to refine coding table and process (which was initially based on review of medical literature on reflection in teaching, and Meizerow's levels of reflection). Student and faculty surveys were piloted and revised. Focus groups following this pilot period were conducted to consider other necessary changes. We collected study data for 2 clerkship blocks. Coding was completed and student and faculty survey data were recorded. We presented a poster on this work (attached) at the New England regional meeting of the Association of American Medical Colleges and were awarded best poster for our work. We are currently drafting a paper for submission to a medical education journal. Additionally, our depth of reflection rubric is being used at UMass in another qualitative analysis study.
3. Poster (attached) and paper in process.
4. The results of our work, that student depth and topic of reflection did not vary based on method, was surprising to all of us. We believe that this is an important finding and look forward to further testing. If confirmed it would suggest that this type of work can be successfully completed using electronic methods which may support broader use.
5. We believe that our reflection rubric should be confirmed, and the work repeated in another setting to increase generalizability. Additionally, since we had a limited

number of faculty involved in the process our findings regarding faculty acceptance of the use of technology, and the time required for learning and use are limited. This should be further investigated. Additionally, we are considering developing a study of different types of multi-institutional blogs for student learning.

6. We do not anticipate unexpended funds, but expect that any will be returned to the President's Office.
7. This was an excellent program, supportive of faculty initiatives; application process and reporting were appropriate in scope and depth. I hope that it will be continued and look forward to hearing the results of other work.



Comparison of Blogs and Written Reflections in Two Medicine Clerkships: A Qualitative Study

M.A. Fischer; K.C. Chretien; H.-L. Haley; C.L. Saarinen; Z.M. Talib; K.E. Roth

BACKGROUND

The scope and availability of online and electronic learning technologies continue to increase. Students enter medical school with greater familiarity and experience with online learning than current faculty.

Medical schools have not adopted new technologies at the same rate as undergraduate schools. Implementing new technology in teaching requires faculty development and support. Rigorous evaluation is required to determine appropriate utilization of emerging technology in medical education.

Blogs (web logs) have been identified as a novel platform for supporting self-reflection and peer to peer learning in clerkships; however, formal comparisons to traditional methods have not been performed.

DESIGN

Medicine clerkship students at two US medical schools (GWU and UMMS) were randomly divided into one of two reflective writing groups. Assignment parameters were the same at both sites.

Blog requirements: Students post twice and comment once. Clerkship faculty read and comment on each student's original post then follow up on comments as needed.

Traditional writing requirements: Students submit one written narrative, then participate in a small group session (face-to-face) to share their reflection and receive feedback from peers and faculty.

	Univ 1	Univ 2	Total
Blog	31	28	59
F2F	33	38	71
Total	64	66	130

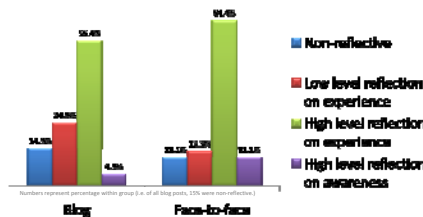
Investigators devised a coding scheme for student writings, based on prior published work, to determine themes and level of reflection.

A pilot study was conducted and essays coded, after which revision of codes led to inter-rater reliability of >75% for four investigators.

Two investigators, blinded to source and institution, applied the coding scheme to all writings with 91% agreement on themes and 82% agreement on levels of reflection.

Pre- and post- test surveys on experiences with attitudes toward technology in education were conducted.

LEVELS OF REFLECTION



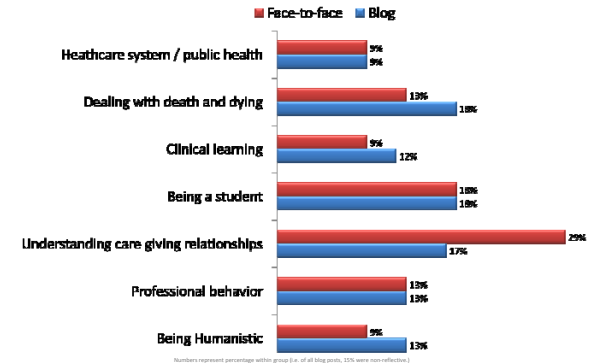
25% of all units that talked about clinical learning (8 out of 32) were rated as non-reflective

All levels of reflection were seen within each theme, with no significant difference in usage between groups or institutions.

Non-reflective	Consciousness: reflections on experiences (low)	Consciousness: reflections on experiences (high)	Critical Consciousness/Critical Awareness
Descriptive text only	Reflectivity: Become aware of a specific perception, meaning or behavior of our own or of habits we have of seeing, thinking or acting. Affectivity Reflectivity: Become aware of how we feel about the way we are perceiving, thinking or acting or about our habits of doing so. Discriminant Reflectivity: Assess the efficacy (degree of effectiveness) of our perceptions, thoughts, actions and habits of doing things; identify immediate causes; recognize context and identify relationships with situation. Judgmental Reflectivity: Become aware of our value judgments about our perceptions, thoughts, actions and habits as positive or negative, good or bad, liked or disliked.		Conceptual Reflectivity: Questioning if our own concepts for understanding are adequate. Ex: John is bad. Is good vs. bad adequate to assess John? Psychic Reflectivity: Recognition that one is making judgments about people prematurely, based on limited information. Theoretical Reflectivity: Awareness of underlying assumptions that cause you to do conceptual or psychic reflection.

Levels of Reflectivity Source: McIntyre, Sarah (1981). A critical theory of adult learning and education. Adult Education, 32(1): 5-24.

THEMES OF REFLECTION



CONCLUSION

Our study suggests there is no difference in themes addressed or levels of reflection when students complete a similar assignment by writing in an online blog or by writing a traditional narrative with face-to-face discussion.

If there is no difference, the option of either the blog format or the face-to-face format may address different learning styles of students.

Faculty resources should be considered (initial related data are being collated).

Schools should consider the balance of methods across their curriculum.

Experience from two institutions may not be generalizable.

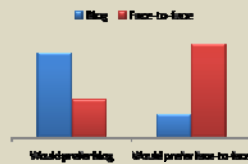
NEXT STEPS

Experiences and findings should be tested in other institutions.

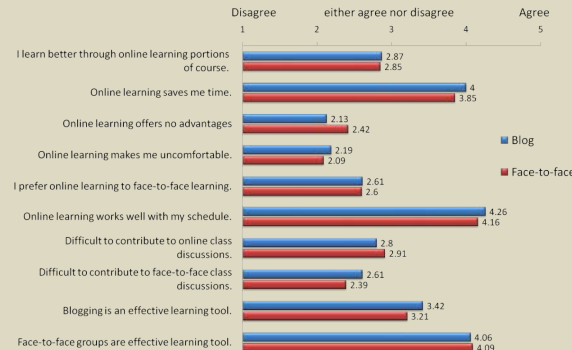
Face-to-face discussions were audio recorded, with permission, and blog comments were saved in order to analyze faculty and student comments and whether, or how, they contributed to reflection. Analysis will look for change in or progressive level of reflection.

Different structures such as shared student blogs across institutions, student choice of face-to-face vs. blog, and blended experiences should be considered.

SURVEY DATA



	Pre	Post	Total
Univ 1	67	64	131
Univ 2	85	79	164
Total	152	143	295



I enjoyed the blogging assignment as it allowed me to simply jot down whatever I was feeling/ thinking at the time rather than feeling pressured to complete a formal paper or write up.

I find it very hard to reflect openly when I am not sure who will be reading my reflection. I also prefer open discussion to written reflection.

I think blogging would've felt like less work & I would have benefitted from reading more of my classmates' reflections. That said, I enjoyed the opportunity to write my reflection and take the time to think about my experiences.

Feedback reminded me of how my experiences have or should have changed me. Often, I would not comment on that aspect but later thought about it.

It was interesting to hear comments on my own personal reflections and I prefer face-to-face because I know that the people are listening.

I was in the writing group and liked the feedback from faculty peers face-to-face

Perhaps more frequent smaller assignments (such as in the blogging assignment) would have allowed me to address multiple topics + incorporate feedback sooner.

I don't think it should be a mandatory requirement.

Go to blogging