A guide for writing a “reflective blog”

What is a reflective blog and why should you use one? (Adapted from Professor Wayne Iwaoka, the University of Hawaii at Manoa)

The blog is used in this class as a modern replacement to the more traditional journal. It is an instrument for practicing writing and thinking. Unlike the typical class notes in which you “passively” record data/information given to you by an instructor, your blog should reflect upon lessons you have learned- becoming a personal record of your educational experience in class.

Maintaining a blog serves several purposes:

- A means of communication, conversation (e.g., between material and yourself, yourself and instructors).
- Provides regular feedback between you and the instructors and helps to match expectations.
- A platform for synthesis of new knowledge and ideas
- Helps to develop critical thinking
- Helps to elicit topics of interest, challenging topics that need improvement, etc.
- Help to clarify troublesome concepts

Teaching is a life-long learning process. As with any other skill, developing good teaching skills requires practice and reflection. A good way to begin thinking about teaching is to self reflect about your own learning. This is the purpose of the class’ blog.

How to set a blog?

1. Create a Gmail account if you don’t have one yet (Google: Gmail)
2. Go to www.blogger.com and enter your Gmail address and password
3. Follow the instructions: (a) sign up for blogger (b) click: create a blog and follow the instructions given to you. Click on start posting and your blog is ready.

To keep your blog private go to “settings”. Several questions will appear on the page.
- Change the setting for “add blog to our listing” from “yes” to “no”
- Change the setting for “let search engines find your blog” from “yes” to “no”
- Go to permissions: under Blog readers choose “only blog authors”. This will permit only course instructors to read and comment on your blog.
- To allow course instructors to view and comment on your blog add them as authors using the following email addresses:
Each time you post your blog click on re-invite author next to the instructor’s name and we will receive a notification email.

If you want to get notified each time we post a comment on your blog select “settings”, then “comments”. First you may want to change the setting for the question “who can comment?” to “only members of this blog”. Next, scroll down to the bottom of the page. You will see “comment notification address”-add the email account to which you want notifications about postings to be sent.

For help: go to http://help.blogger.com/

When and what to write?
You are expected to write **every week** and post your blog no later than each Friday of the week at 5:00 PM.

Below are guiding questions that will help you with writing your blog and reflecting upon your learning experiences.

1. “What new science and pedagogy concepts did I learn this week?”
2. “What excited me about the week’s activities science-wise, and why?”
3. “What excited me about the week’s lessons pedagogy-wise, and why?”
4. “Which of the week’s activities helped me best understand new science concepts (or review science concepts I learned about in previous classes)? Why?”
5. “Which of the week’s activities was least useful to me science-wise? Why?”
6. “Which of the week’s activities was most useful to me pedagogy-wise? Why?”
7. “Which of the week’s activities was least useful to me pedagogy-wise? Why?”

You will have to address ALL guiding questions, each week, in order to receive a full credit (see rubric below). In addressing these questions, record your own thoughts, ideas, responses and reactions to any of the above activities. Make notes about concepts, questions you have, and any confusion that may arise. Use the blog to explore possible solutions to problems being raised in class or alternative activities to the ones presented in class. Record new insights and problem solving strategies realized during discussions with fellow students and instructors. The blog reflects your own thoughts and ideas. Be as original and critical (constructively) as you can. You can use whatever writing style you are comfortable with as long as it is clearly written and sensible.

What are we looking for when we grade your blog?
You will not be graded upon whether your ideas are scientifically or pedagogically correct or not, and there will be no docking of points for poor writing or grammar (unless it is not clearly written).

The table below presents the “essentials” we look for:
<table>
<thead>
<tr>
<th></th>
<th>Exceeds Expectations (3)</th>
<th>Meets Expectations (2)</th>
<th>Less Than Expected (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blog is posted on time</td>
<td></td>
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<tr>
<td>Blog is readable and clear</td>
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<tr>
<td>Blog reflects upon all guiding questions above</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Blog is thoughtful and creative</td>
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</tbody>
</table>

Below is an example for what we expect from your blog:

BLOG EXAMPLE
• What new science and pedagogy concepts did I learn this week? I’m not a science major so the concept of density was fairly new to me. While doing the activities I realized that I had some misconceptions about density, for example, I thought that heavy things always sink. Last semester in another class, I learned several ways to “use the Internet in science education,” but the examples given in that class were very different from the ones given in this class this week. So I have definitely added to the pool of resources that I can use in the future.
• What excited me about the week’s lessons, science-wise? First, I really hadn’t realized the importance in the ocean of thermal expansion to the density of human-made devices. The activity with the little metal bridge, car, and Bunsen burner was fun and it really drove the point home to me. The effect of heat on the car was large and easy to see. I remember in my high school physical science course, to demonstrate thermal expansion we had a brass ball that couldn’t pass through a brass ring when we heated the ball in a flame. But where outside of school do you see brass rings and balls?

Second, thinking about the Nature of Science is really new to me. I had never really thought that scientists were subjective in any way. My teachers always stressed that scientists are objective. But it does make sense that a scientist can only see problems and attack problems in ways that he or she is familiar with.

• What excited me about the week’s lessons, pedagogy-wise? Several things did, actually. First, I think if I teach science I will use the PVC-pipe activity (above), because it would be a good, inexpensive way to teach about thermal expansion. It’d probably reach a predominantly visual learner as well as a predominantly kinesthetic learner. And if I talked about what was going on, or a student team member talked about it, it might also reach a predominantly aural learner.

Second, I hadn’t really thought that a discrepant event would always be a good way to get the student’s attention at the start of a science class. In my high school science courses, a lot of the classes started off in really boring ways, with the teacher usually saying something like, “Today we are going to do thermal expansion.” If I become a teacher, I’ll definitely start out classes with a strange, unexpected phenomenon!
• What was least useful to me, science-wise? I’ve already done the “heat lamp shining on colored paper squares” activity in a couple of courses before. It’s a good example of energy transfer, but I’m going to teach biology and I probably won’t use it.

• What was least useful to me, pedagogy-wise? I already knew that the “Seven Steps of the Scientific Method” we memorized in middle school is not how scientists usually do their investigations. My high school chemistry teacher was a great debunker and she told us about serendipity in science and changing directions in the middle of an investigation, and things like that. If I become a teacher, I’ll probably have to debunk that idea, too!