

## Reflective Journals and Critical Incidents

**Description** **Reflective journal** is a piece of writing which allows students to record thoughts and insights about their own learning experience. This can be writing about what and how they have learned and understood a topic. It can also be a review of their learning process, self-evaluation of their performance and planning for future learning based on past learning experience, etc. (PolyU Learning-to-Learn Project).

**Critical Incidents** Students report on critical incidents that seem, to them, powerful examples of the topic studied, or move them to think deeply about the topic. By explaining what make these incidences critical and how they relate to concepts learned in the classroom, we can gain insight about how students (1) interpret what they have been taught, and (b) make use of the information (Biggs, 1999).

### **Example 1** *Reflective Journals in Earth System Science*

- a. **Post Your Questions.** As a rule of thumb, plan to post your initial thoughts, theories, or questions; enter information and insights as you locate them; and then reflect on how far you've come. This process will not only capture the story of your knowledge building, but it will also clearly show your growth over the time of the course. For example, your initial thoughts could be 'I have a theory about how the hydrosphere is affected by a volcano....' and what you want to know, 'How is the fallout affected by the heat released in a volcano?' Write about the reasons for your questions and theories, as well as how strongly you feel about them.
- b. **Post What You Know.** In the beginning of each week your entries will focus on what you know, 'I know that the atmosphere is affected by a volcano....' And what you want to know: 'How is the fallout affected by the heat released in a volcano?' At the end of each week, your entries might read, 'What I didn't realise....' And 'I figured out....when James made that entry about the remote sensing data that...'

(Adapted from NASA Classroom of the Future, Center for Educational Technologies. To learn more about this assignment please see <http://www2.cet.edu/ete/5-8/cintro/journal.html>)

### **Example 2** *Critical Incidents in Communication*

- a. Provide a 1-page account of an occasion when you are not sure how to respond. Perhaps, you feel that if you speak your mind you will hurt someone's feelings, or drive them away, or get them angry, etc. On the other hand, you may want to inform them of how you feel. What do you do in such a situation?
- b. I will select particular challenging and relevant critical incidents from the ones you all hand in and I will distribute selected ones for you to work with. You will work as a group to discuss your analysis of these critical incidents (Group Exercises), to discuss the communication issues you see in the incidents, and to discuss how communication theory relates to these incidents. Then you will be asked to write your own, individual analysis of the incident to be handed in a week later (Analysis of the Critical Incident). The ultimate goal of this exercise is to apply theory to the critical incidents – just what are the

communication issues that the incident highlights? What are the central concepts that attach to the incident? How does theory apply, what analysis of the event can we draw out with the help of the theory? (To learn more about this assignment visit: <http://www.usm.maine.edu/~com/critical.htm> )

**What Outcomes are Assessed?**

Both types of journaling are appropriate assessment for deep learning, in which, the learner needs to reflect in order to *relate* theory with experience; to *synthesise* knowledge from multiple domains; to *critique* knowledge encountered; and to *evaluate* the effectiveness of the learning processes itself. Besides forcing students to think about the relevancy of the class topic, these writings will give instructors clue as to how students (a) have *interpreted* what they have been taught, and (b) can make *use* of the information.

**How Authentic is the Task?**

Critical incidents (Example 2) are drawn from multiple authentic experiences of the class members themselves. Furthermore, it is learning by examining ‘What didn’t work for me?’ rather than ‘What does the book say?’ From there, one is led to examine theories to see how they could, or could not, address real-world problems.

**What Kind of Learning is Promoted?**

- Journaling is not only for assessment; it is intrinsically valuable for deep learning. It captures the students’ judgment on the relevance of the content taught, and their ability to reflect upon experience using that knowledge.
- In fact, journaling is an excellent means to attain and to assess Strategic Objective 1 attributes. What about keeping a Leadership Critical Incidents journal? Or a Learning Journal in Cultural Appreciation? Or maintain an online journal on Significant World Events?
- Journaling develops lifelong learning skill. Many successful people maintain a learning journal or diary throughout their lives. Others share their journals within a community of practice by leveraging the power of the Internet.
- When journals are shared and critiqued amongst peers, as in both examples above, they promote collaborative learning. Students learn from other people’s encounters with knowledge and experience through active discussion and feedback.
- Students can gain valuable insight about their learning progress and strengths and weaknesses as learners, as well as the effectiveness of their own learning strategies. As a result, they will become more capable in planning for overcoming learning difficulties.