Implementing Reflection in Academic Courses
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“It is not sufficient simply to have an experience in order to learn. Without reflecting upon this experience it may quickly be forgotten, or its learning potential lost. It is from the feelings and thoughts emerging from this reflection that generalizations or concepts can be generated. And it is generalizations that allow new situations to be tackled effectively” (Gibbs, 1988, p. 9).

Definitions of reflection
There are many purposes and definitions of reflection. Below are two helpful definitions relevant to Furman’s academic context.

- “[Reflection] refers to the processes that a learner undergoes to look back on his past learning experiences and what he did to enable learning to occur (i.e. self-reflection on how learning took place), and the exploration of connections between the knowledge that was taught and the learner’s own ideas about them (i.e. self-reflection on what was learned)” (Lew & Schmidt, 2011, p. 530).
- “Critical reflection is the part of experiential learning that generates, deepens, and documents learning. When used in this capacity, it needs to be understood not as ‘touchy-feely,’ non-gradeable, private, stream-of-consciousness, but rather as a reasoning process that is analytical, integrative, assessable, subject to public critique, and structured/guided” (Clayton, 2010, p. 11).

Some strategies of how to incorporate reflection in your courses
Below are some possible uses and genres of reflection. This is not an exhaustive list. Please feel free to adapt these ideas to fit the goals of your classes and the needs of your students.

- **Goal-setting:** Have students reflect about their personal, academic, and/or professional goals as related to your course at the beginning of the semester. Students then devise an action plan. Instructors can also incorporate their own student learning objectives (SLO) in this activity. At midterm, students self-assess effective learning strategies and gains in knowledge. At the end of the course, students should review their goals and reflect on what allowed them to achieve (or not) these objectives.
  - This handout by Goalbook can assist students with goal-setting.
  - This handout by Goalbook can help instructors scaffold and communicate with students as they set their goals for an academic experience.
  - Goals should be SMART: Specific, Measurable, Action-oriented, Realistic, and Timely (Doran, 1981).

- **Exam wrappers:** Students reflect prior to and after an exam to process their preparation and performance. See specific examples the reflection prompts implemented in science and math courses at Carnegie Mellon University. These examples can easily be adapted. See Jane Love for more details, as she has already researched and designed exam wrappers for use on Moodle.

- **Low-stakes writing:** Upon completing a major assignment (e.g., research paper, presentation, project), students can participate in a low-stakes writing activity in class to reflect on what they learned (content) and how (process) they learned. Some example prompts are:
  - You are now the “resident expert” on your topic. What new information did you glean from this activity that you found valuable and that you would like others to know? Why?
  - How might you apply this knowledge in your personal, academic, and/or professional lives both in the present and future?
What are some crucial lessons that you learned about the process of the assignment? What strategies will you use again and what will you do differently to complete this type of assignment?

- **Brief surveys**: Similar to the low-stakes writing activity, students can participate in a brief survey to process a particular academic experience in which they examine what they learned, how they felt, what was the effectiveness of their participation, and how they will apply this knowledge in the future. Faculty could use online resources such as Moodle or Qualtrics.

- **“Minute papers” or “exit tickets”**: Minute papers can help students reflect on important information they learned after a class lecture or lesson. They also provide professors with valuable formative feedback of what students took away from the lesson.
  
  - See an example of a minute paper designed by Tufts University’s Center for the Enhancement of Teaching and Learning
  
  - *On Course* provides another example of minute paper techniques for higher education

- **The traditional reflective essay**: Students respond to a series of prompts or questions typically as an academic experience concludes. The nature of the prompts closely relates to student learning outcomes (SLOs).

- **Reflective journaling**: Reflection and reflective journaling have been incorporated in Problem-Based Learning (PBL)—or a pedagogy that involves student working collaboratively on a complex, “ill-structured” problem—to assist them with making connections between prior and new knowledge, as well as helping them assess how they might reapply the knowledge and strategies in future contexts (Hmelo-Silver, 2004, p. 247). Together, reflective journaling and PBL foster enhanced self-direction and learner agency.

**Reflection in community-based learning**

Many of our on-campus courses integrate community-based learning (CBL) to some degree. When students engage in CBL, reflection is crucial to the success of this pedagogy and should be implemented before, during, and after completing a CBL activity. A few models and resources are found below:

- Ash and Clayton’s DEAL Model (Describe, Examine, and Articulate Learning)
- Duke University’s *Office of Civic Engagement* have some helpful resources on reflection in service learning
- Sonoma State University’s “What? So what? Now what?” model for service-learning
- The University of Missouri - St Louis provides a variety of reflective modalities and techniques

**Some considerations**

- Connect reflective assignments to course goals and SLOs.
- Reflective assignments can be brief; longer, more involved reflective assignments do not necessarily mean they are better.
- Reflection can incorporate (inter)personal, academic, and professional components. You do not have to include all of these areas if they do not correspond to your course goals.
- Consider other modalities beyond individual written assignments. Some ideas include:
  - videos or audio recordings of spoken reflections done individually, in pairs, or in groups (Huang, 2017);
  - online reflections (i.e., individual blogs, class blogs, discussion boards);
  - individual interviews between students and instructor, advisor, or mentor;
  - a class debrief after a written reflection;
  - in-class or community-based presentations; and
• art-based reflections (e.g., photography, poetry, films, music, storytelling, digital stories, painting, and drawing) (Harvey et al., 2016, as cited in the Furman Reflection QEP Report).
• These strategies can be implemented in on-campus courses or courses abroad, as well as in other high-impact educational practices (Kuh, 2008). More specific information on how to incorporate reflection in Furman’s signature HIPs to come.
• Explicitly explain to students the purpose of reflection in your class.
• Talk to your colleagues; many Furman faculty are already implementing reflection in their courses in a variety of creative and effective ways.
• You probably are already doing much of this; continue to add to your arsenal of reflective practices.

Assessing reflection and helpful models (click on links where applicable)

• Clayton’s (2010) handout on reflective practices has a host of information, including a rubric on how to assess reflection on p. 27.
• Kreiger (2014) offers a rubric for assessing journal reflection.
• The Teaching Commons at DePaul University provides advice on assessing reflection.
• Jones from the Office of Service Learning at the University of Iowa outlines some guidelines for assessing reflection.
• Bennett et al.’s (2016) model of reflection (cf. Ryan & Ryan, 2015) can be implemented to help students produce deeper, more meaningful reflections; see p. 9 for a detailed explanation of the levels (i.e., reporting and responding, relating, reasoning, and reconstructing).
• Reflective assignments could be included in students’ overall participation, and not assigned a numeric grade.

Upcoming events related to reflection (spring 2018)

• The FDC is developing a series of microlectures on reflective practices at Furman; these 2-minute video clips along with corresponding instructional materials will be housed on the FDC website.
• FDC luncheons: Friday, April 6 and Friday, April 12 will feature how Furman faculty have incorporated reflective practices on campus and abroad.
• Departmental visits and individual consultations available. Please contact Stephanie Knouse, Cothran/FDC Fellow, directly at stephanie.knouse@furman.edu if interested.
• Sample reflection prompts for students attending and/or participating in Furman Engaged! (Tuesday, April 10) will be available for faculty.
• Share your ideas! Should you have any ideas or specific techniques involving reflection you would like to share, please contact Min-Ken Liao (Executive Director of the FDC), Stephanie Knouse (Cothran/FDC Fellow), or Jane Love (Senior Faculty Fellow).
• More events will be designed imminently based on faculty’s specific interests and needs. Stay tuned!
Selected references