Peer Feedback

Royce Sadler identifies three prerequisites for students to benefit from peer feedback in academic tasks. A student must know

1. What a good performance is (i.e. must possess a concept of the goal or standard being aimed for);
2. how current performance relates to good performance (for this, students must be able to compare current and good performance);
3. how to act to close the gap between current and good performance.

From this, Sadler points out that for students to be able to gauge current performance against good performance (ii), and act on that knowledge to close the gap (iii), students must “already possess some of the same evaluative skills as their teacher” (Sadler, 1989).

In this course, we want to opt for full transparency so that a student can understand exactly what is required for each assignment, what key performance indicators (KPI) of learning looks like, how the assignment will be graded, what a good submission looks like, and what poor submissions look like.

**Understanding the assignment**

This will require a detailed description of each assignment. There will be a discussion/QA portion of the site (consistent with most MOOC’s) (or space on Slack). Here, students can ask for clarification on the assignment description. This open forum will help point out ambiguity in the assignment description and will allow the course designer to improve the assignment descriptions.

**Key performance indicators of learning**

KPI’s of learning are not always clear. When a student does not recognize what they should be gaining from an assignment, the assignment can feel arbitrary or like busy work. The student doesn’t feel that there is any tangible skill to be gained from their work and can start to lose interest quickly. For this reason, we will explicitly say in the assignment description how they will “come up” from this assignment.

This tugs at the strings of intrinsic motivation. A letter grade is clearly extrinsic motivation, which research has proven is less effective than intrinsic motivation. “Students must see some relevance of the potential learning opportunity to their personal goals” (Johnson, 1999). By explicitly listing skills a student will walk away with after completing an assignment, it gives them something tangible to measure their own skillset with.

**Evaluating submissions**

A student must know how an assignment will be graded, and this must be consistent with the KPI’s. A student must simply submit work that reflects they walked away with completing the KPI’s of learning. The assignment description can convey this by listing out what aspects of the assignment will be scrutinized. Homework evaluations will help refine these moving forward (similar to how the forums will refine assignment descriptions).

Even with a detailed assignment description/grading rubric, students still may feel some ambiguity. If a student is unclear on what the deliverable should be, or how it should be implemented, it can make it difficult to get started. Institutions nowadays spend effort on preventing students from copying code of other developers. However, with Github, past work is very accessible, and most students/developers wouldn’t be worth hiring if they couldn’t find a way to obtain some past version of an assignment. It is ignorant for a professor to assume their students aren’t using something as a basis of comparison. Why not address this directly and give the student an example of a completed assignment, both good and bad. State exactly why one submission received a good grade/poor grade. This will give them context and explicitly lay out for them what their submission should include (as a minimum).

**Peer feedback**

At this point, the student knows exactly what is expected of them and possess “the same evaluative skills as their teacher.” We can now have students review their peers’ submissions. When reviewing their peers work, they will follow David Nicol and Debra Macfarlane-dick guide to seven good peer review practices, which:

* helps clarify what good performance is (goals, criteria, expected standards);
* facilitates the development of self-assessment (reflection) in learning;
* delivers high quality information to students about their learning;
* encourages teacher and peer dialogue around learning;
* encourages positive motivational beliefs and self-esteem;
* provides opportunities to close the gap between current and desired performance;
* provides information to teachers that can be used to help shape the teaching.

**REFERENCES**

1. Johnson, Rebecca Grooms. "Recent Research in Pedagogy: Intrinsic versus Extrinsic Motivation." *American Music Teacher*49.2 (1999): 59. Web.
2. Sadler, D. Royce (1989). Formative assessment and the design of instructional systems. Instructional Science 18:119-144 (1989). Web.
3. Nicol, David, Macfarlane-dick, Debra. (2005). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice.