

Linking the Design of Writing Assignments for a First-Year Seminar to Students' Metacognition.
David Reuman, Department of Psychology, Trinity College
May, 2019

One of my goals for participating in the 2018-2019 Writing Fellows Program has been to articulate linkages between first-year students' metacognition and their development of skills in writing argumentation papers. A second goal has been to improve the effectiveness of feedback provided to students about the argumentation papers they are writing. I would consider feedback to be effective when it is understood by student writers, is actually used by students to make substantive revisions to their writing, and leads students with varying initial levels of writing skill to produce a convincing argument regarding a debatable thesis. Feedback may originate from myself (the seminar instructor), peers in the seminar, the Academic Mentor affiliated with the seminar, Writing Associates at the Writing Center, and from student-authors' own self-reflections. Feedback is always situated within the design of a writing assignment, the ideas and evidence afforded through readings and seminar discussions, formative and summative stages of assessment during the writing assignment, and opportunities for revision (Graham, 2018). Feedback is a powerful determinant of learning (Hattie & Timperely, 2007).

First-Year Seminar Context

My first-year seminar is called "Understanding and Reversing Prejudice and Discrimination". Among other writing assignments, during the seminar I ask students to write three short (750 to 1000 word) papers on debatable topics. For the Fall 2018 semester, these writing assignments were organized around key questions:

- How well do theories of racism and racial identity development help us understand racial prejudice? How well do they account for specific instances of stereotyping, prejudice, and discrimination?
- How effective and fair are remedies for discrimination? Is affirmative action effective? Is affirmative action reverse discrimination?
- How are forms of prejudice and discrimination similar and different? Why does the US legal system currently endorse "separate but equal" to address sexism in athletics but not to address racism in education? How can a person be against gay marriage but in favor of racial civil rights? If there are "hostile" and "benevolent" forms of sexism, do there also exist "hostile" and "benevolent" forms of racism and homophobia?

The first phase of each writing assignment involves reading selected articles on a debatable topic (e.g., is affirmative action a form of reverse discrimination?). In order to encourage active processing of the readings, I ask a pair of students to serve as discussion facilitators for a particular reading. Prior to when the seminar discusses a reading, the facilitators collaborate and post a brief summary of the reading in a Moodle forum, along with two thought-provoking "focus questions" about the reading. Either I or the Academic Mentor for the seminar coach the facilitators about the structure of the summary and the framing of the focus questions. Once the seminar has read and discussed the curated background material, I distribute guidelines for writing an argumentation paper about the debate. For each paper, students are required to assert a clear thesis, support it with arguments and evidence from the readings, consider counter-arguments and contrary evidence, show why the counter-arguments and contrary evidence are

not as convincing as the arguments and evidence that support students' chosen thesis, and develop a conclusion concerning the significance of the debate.

At the beginning of the semester I introduce all students to the Trinity College First-Year Writing Rubric and also a seminar-specific Rubric for Argumentation Papers. Each paper goes through a process of peer review and revision. I assign students to peer-review groups. After students have written a first draft of their paper, they review drafts written by two classmates, following a standardized set of review questions. When students turn in the final revised draft of their papers, I ask them to also submit a brief "Statement of Revisions" – what suggestions for improvement did the student receive from peer reviewers and how did the student respond to each suggestion. I encourage students to meet with me (and with the Mentor and with a Writing Associate at the Writing Center) as well during the writing process, and I volunteer to confer with them about their choice of thesis, choice and alignment of arguments and counter-arguments, and completeness with respect to addressing all components of the assignment. (A minority of students actually take me up on this offer to confer before they submit a final draft). As the final step in each writing assignment, I give students written feedback on the College First-Year Writing Rubric form, my seminar-specific Rubric for Argumentation Papers, marginal comments and an end-of-paper message directly on the paper, and a letter grade for the portfolio.

These steps in the writing process are shown in the left-side panel of Figure 1.

Self-regulated Learning and Metacognition, linked to Writing

Self-regulated learning is thought to depend on three main components: cognition, metacognition, and motivation (Schraw, Crippen, & Hartley, 2006). Cognition as part of self-regulated learning refers to skills and strategies for attending to and remembering information, solving problems, and thinking critically. Metacognition refers both to knowledge of cognition and regulation of cognition related to learning. Regulation of cognition is often broken down further into planning, monitoring, and evaluating activities (Schraw & Moshman, 1995). Ambrose, Bridges, DiPietro, Lovett, and Norman (2010) have identified several metacognitive skills required for college students as learners – assessing task demands, evaluating personal strengths and weaknesses, planning, applying strategies to improve learning, monitoring performance, and reflecting and adjusting to feedback as needed. The motivational dimension of self-regulated learning typically includes beliefs about one's efficacy as a learner and about the intrinsic and utility values of learning tasks (Pintrich & De Groot, 1990; Wigfield & Eccles, 2000).

Metacognitive skills required for learning activities, including writing argumentation papers, are listed in the right-side panel of Figure 1.

Having made the metacognitive skills explicit, their linkages to the writing process can be articulated. When I provide students with guidelines for writing an argumentation paper, I include overall learning objectives but also itemize specific standards to be met (e.g., the paper should assert a thesis, present supporting arguments and evidence, consider counter-arguments and contrary evidence, etc.). At this moment in the writing process, I expect that students will "assess the task" on their own with the written guidelines that I've given them. I can tell when

students have accurately assessed the task, or I can help them refine their assessments of the task, when we have a conference, but not all students seek out a conference. Similarly, when I hand out guidelines for the argumentation paper and stipulate that the first draft will be due in a week or ten days, I am expecting that students will “plan” the structure of their argumentation paper and their time frame for writing the draft amidst all of their other course demands. Without an individual conference, I can’t tell how well students are actually planning. Making the linkage between metacognition and writing explicit has made me realize that I could better understand (and respond, as needed, to) all students’ initial levels of metacognition if I asked them to submit an informal, written statement confirming their understanding of the writing assignment and their plan for writing the first draft. I have never before considered asking students to “evaluate their strengths and weaknesses as a writer”; knowing this would help me better direct students to resources that might be useful.

Once students have submitted a first draft and received peer feedback – and potentially feedback from myself, the Academic Mentor, or a Writing Associate in the Writing Center – they are in a position to “monitor their performance” from the perspective of an external audience. Reading other classmates’ first drafts and commenting on those drafts can also contribute to their understanding of themselves as the audience for the argumentation paper. Serving as a peer reviewer may help students “assess the task” from a new vantage point. Reading classmates’ papers may help the students realize that they had left out an important element of the assignment, or they had interpreted the assignment very differently than their peers. Although I haven’t done this before, asking students to write briefly and informally in class about what they learned through the peer review process could give me a better sense of how well the peer review process is working for all members of the first-year seminar.

Having students submit a revised draft with a reflection statement is meant to activate the “reflection” phase of metacognition. I see wide variation in how substantive are the revisions and the reflections that students submit. In my final summative assessment, I make a point of recognizing students’ revisions and reflections, both when they are unusually substantial and when they are unusually perfunctory.

Challenges in the Process of Writing Argumentation Papers

First-year students seem to have particular difficulty developing counter-arguments. It is possible that this stems from a history of writing instruction in high school that has emphasized a “five-paragraph” essay format with a thesis paragraph, three paragraphs of supporting arguments and evidence, and a concluding paragraph, but has never included attention to counter-arguments. For those students who have simply not been asked to develop counter-arguments in previous writing assignments, explicit consideration of the function of counter-arguments may be enough for them to learn how to build counter-arguments in a first-year college seminar assignment. Asking students to “free write” about their understanding of the role of counter-arguments, before they write a full first-draft of the argumentation paper, may engage the “assess the task” phase of metacognition. These “free writes” can help faculty better understand why individual students approach the assignment as they do.

Differing stages of intellectual development (Masiello, 1993; Perry, 1970) may be another reason why writing counter-arguments is difficult for some first-year college students. If students think like “dualists” – ideas are either right or wrong – the need to imagine counter-arguments may seem unnecessary. Faculty must convey through feedback that the goal of argumentation writing is not simply to please the faculty person/authority figure. If students think like “relativists” – ideas are all just equally-plausible opinions – counter-arguments may seem unimportant. Again, faculty feedback can move first-year students in the direction of understanding that the foundations for contending ideas matter, and they are not obviously equally convincing. Even if all students do not reach a stance of “reflective commitment” to a thesis, faculty can highlight that learning objective in the seminar syllabus and in ongoing feedback during the writing process.

Another challenge in the writing process is overcoming students’ resistance to revising their writing once they consider it completed. I try to forestall students’ sense that their writing is completed by announcing a peer-review-and-revision process for argumentation papers, and by not providing grades or points until the review-and-revision process has occurred. Formative assessment feedback, which students receive throughout the writing process, seems to be most powerful for changing what students write and learn about writing (Wiliam, 2018). Informal conversations with students about their writing while the writing is at a draft stage can have significant effects on their revisions. The summative assessment feedback – my comments on the final draft of the paper, checks and points on a rubric, and letter grade at the end of the process – seems to have a relatively small impact on how students will write the next argumentation paper. If anything, summative feedback seems to signal that the writing assignment is done. Finding ways to make the writing process salient is critical in encouraging substantive revisions.

References

- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How Learning Works: Seven Research-based Principles for Smart Teaching*. San Francisco, CA: John Wiley & Sons.
- Graham, S. (2018). Instructional feedback in writing. In A. A. Lipnevich and J. K. Smith (Eds.), *The Cambridge Handbook of Instructional Feedback* (pp. 145-168). Cambridge, UK: Cambridge University Press.
- Hattie, J., & Timperely, H. (2007). The power of feedback. *Review of Educational Research*, 77, 81-112.
- Masiello, L. (1993). Write at the start: A guide to using writing in freshman seminars. *Monograph Series Number 9*. Columbia, SC: National Resource Center for the Freshman Year Experience, University of South Carolina.
- Perry, W. (1970). *Forms of Intellectual and Ethical Development in the College Years: A Scheme*. New York: Holt, Rinehart and Winston.
- Pintrich, P., & De Groot, E. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33-40.
- Schraw, G., Crippen, K. J., & Hartley, K. (2006). Promoting self-regulation in science education: Metacognition as part of a broader perspective on learning. *Research in Science Education*, 36(1-2), 111-139.
- Schraw, G., & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review*, 7(4), 351-371.
- Wigfield, A., & Eccles, J. S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68-81.
- William, D. (2018). Feedback: At the heart of – but definitely not all of – formative assessment. In A. A. Lipnevich and J. K. Smith (Eds.), *The Cambridge Handbook of Instructional Feedback* (pp. 3-28). Cambridge, UK: Cambridge University Press.

Figure 1.
Linking the Writing Process in a First-Year Seminar and Student Metacognition.

