



SERVICE-LEARNING ASSIGNMENTS: USING REFLECTIVE WRITING FOR SCIENCE AND ENGINEERING COURSES

As an integral component of service-learning pedagogy, faculty should help students reflect on their experiences in the community and connect theory to practice. To do this, students need to place their experiences within a critical framework. Reflection is most meaningful when structured as a series of questions or prompts where students connect their service experience to the larger issues you wish them to consider in their readings.

Part I of this tipsheet provides writing tasks designed for specific points in the semester as well as generalized student prompts that you can assign any time. Part II provides specific prompts that you can adapt for your class. You might also wish to refer to our tipsheet, “Using Reflective Writing in Service-Learning,” which provides suggestions for using low- and high-stakes writing in course design, managing the paper load, and grading.

PART I: STUDENT PROMPTS FOR SPECIFIC POINTS IN THE SEMESTER

Early in the semester

- Explain your short term and long term goals for the project. Explain the community’s short and long term goals.
- Anticipate what you see as the biggest obstacle to completing your task. Is it money? Lack of trained personnel? Limited community support? Or something else?
- Survey the community/clients to determine the amount of support. Describe the results.
- List several ways you could measure the project’s ultimate success. Which one will you use? Why?
- Consider what you think will be the most technically challenging part of this project. Why?
- Give the time line for this project. Do you think it is realistic? Explain.
- Describe what volunteers in this organization have done to get this project started.

Mid-semester

- Explain, using three specific examples, how the course work is helping you with your project.
- Explain, using three specific examples, how the project is helping you with your course work.
- Consider what technical skills you are using in this placement. Write a paragraph about two.
- Describe the most technically challenging part of this program.

Late in the semester

- Comment on the level of community support for the project. Do you think it will continue? How can future work build on the project from this semester?
- Calculate the funding needed to continue the project after the semester ends. List possible sources of funding. Draft a letter to one source asking for continued funding.
- Discuss the ways this placement helped you reconsider your career goals.
- List changes/alterations you would make in the project if the placement were to be offered again.
- List skills/theories/techniques the course or readings should have covered.
- Describe the most technically challenging problem you faced. How did you go about solving it?
- Decide whether you would recommend this placement to next semester’s students. Explain.
- Graph the differences between projected and the actual costs. Summarize what the graph shows.



Any time in the semester

- Analyze the role your community partner plays in your project.
- Speculate on whether your project could translate to other communities or service organizations.
- Describe the kind of feedback that has been most helpful in your project.
- Reflect on how this placement is expanding your knowledge of community resources.
- Write two letters explaining the project: one for your professor and one for your campus newspaper.
- Draft a memo discussing one possible environmental/economic downside of the project.
- Discuss the ways this project ties into your class and readings.
- List the people skills you are using in this placement. Write a paragraph about two of them.

PART II: SPECIFIC PROMPTS YOU CAN ADAPT FOR YOUR CLASS

Projects such as winterizing/weatherproofing homes

- Compare sales prices of weatherized and nonweatherized housing, using graphs, charts, or tables. Write a paragraph summarizing your findings.
- Prepare a brochure for residents showing simple, low-cost steps to weatherize a home.
- Survey potential users to find out what they see as problems.

Projects such as developing a playground for preschool or neighborhood park

- Interview parents. Write a memo outlining their safety concerns (from falls, from strangers, etc.).
- Describe a playground you used when you were a child.
- List the most dangerous equipment when you used playgrounds.
- Write a memo evaluating “flooring” materials for cost and safety. Write a memo recommending one.
- Make a presentation about the playground to parents.

Projects such as customizing information systems for a community agency

- Interview agency employees to see what they’d like. Write up the results.
- Describe one difference between designing a system in practice and in theory.
- List the major issues you see as you start this project.
- Reflect on how the needs of the agency affect the efficiency of the design.
- Survey end users to see how comfortable they are with your technology. Explain the results.
- Make a presentation to the agency explaining what you are doing.

Projects such as stabilizing stream banks

- List the potential beneficiaries or possible stakeholders.
- Describe what may happen if the stream is not stabilized, at that location and downstream.
- Describe the most challenging technical problem.
- Reflect on possible negative effects of stabilization.

USEFUL SOURCES

<http://www.compact.org/disciplines/reflection>

<http://www.writing.ku.edu/instructors/docs/journals.shtml>

