

Potential Questions for Journal Reflection¹

For Pre-Service Reflection:

1. What mathematical skills will you need to use in order to complete your project?
2. What other skills will you need to use in order to successfully complete your project? (technology skills, communication skills, problem-solving skills, writing skills, etc.)
3. What aspects of this project do you expect to be exciting, challenging, frustrating, rewarding for you?
4. What are your expectations about the site where you will do your project – what will it look like? What will the people be like at the site?
5. How does your project relate to your mathematics class as a whole?
6. What kind of help will you need from your instructor and from the school to make your project successful?
7. What assumptions might the staff at the community partner organization have about high school students engaged in service-learning? How can you make the best possible impression at the community partner organization?

For Mid-Semester or End-of-Semester Reflection Sessions:

Questions about student skills:

1. What mathematical skills did you use in order to successfully complete your service project?
2. What people skills and communication skills did you use to successfully complete this project?

Questions about success of the project:

3. What was the best part of your service-learning experience?
4. What would you change about the design of the service-learning project?
5. What specific comments and recommendations do you have regarding communicating with the community partner, working in groups, logistics, and the time commitment required for the project?

Questions about the community partner:

6. What limitations or obstacle does your community partner face? (lack of money, space, staff, etc.) How do service-learning students help the organization? Based on your observations, what further technical assistance does your agency need? Where could your organization turn to in order to get that assistance?
7. What societal problems is your agency addressing? How do they address them?

¹ From Webster Vinsonhaler (2005), modified for a high school context as opposed to a college setting. Though this list splits the reflection questions into pre-service and mid-service/end-of-service, modified versions of these questions can be used as prompts during the regular journaling process throughout the project.

Questions about service after graduation:

8. Do you envision yourself lending your mathematical skills or time to community organizations or individuals in the future? If yes, what kind of work would you find satisfying? Direct service work? Serving on a non-profit agency Board of Directors?
9. How would you define “corporate responsibility to the community”? Do you believe that large corporations have a responsibility to help out the community that they operate in? Do you believe that schools have a responsibility to assist in the community that they reside in?

SERVICE-LEARNING IN STATISTICS RESOURCES

Hadlock, C.R. (2005). *Mathematics in service to the community: Concepts and models for service-learning in the mathematical sciences*. Washington, DC: Mathematical Association of America.

Chapter 3: Service-Learning in Statistics

Reed, G. (2005). "Perspectives on statistics projects in a service-learning framework." In C.R. Hadlock (Ed.), *Mathematics in service to the community: Concepts and models for service-learning in the mathematical sciences*. Washington, DC: Mathematical Association of America.

Root, R., Thorne, T., & Gray, C. (2005). "Making meaning, applying statistics." In C.R. Hadlock (Ed.), *Mathematics in service to the community: Concepts and models for service-learning in the mathematical sciences*. Washington, DC: Mathematical Association of America.

Sungur, E.A., Anderson, J.E., & Winchester, B.S. (2005). "Integration of service-learning into statistics education." In C.R. Hadlock (Ed.), *Mathematics in service to the community: Concepts and models for service-learning in the mathematical sciences*. Washington, DC: Mathematical Association of America.

Hydorn, D.L. (2005). "Community service projects in a first statistics course." In C.R. Hadlock (Ed.), *Mathematics in service to the community: Concepts and models for service-learning in the mathematical sciences*. Washington, DC: Mathematical Association of America.

Massey, M. (2005). "Service-learning projects in data interpretation." In C.R. Hadlock (Ed.), *Mathematics in service to the community: Concepts and models for service-learning in the mathematical sciences*. Washington, DC: Mathematical Association of America.

Chapter 6: Getting Down to Work

Webster, J. & Vinsonhaler, C. (2005). "Getting down to work – a 'how-to' guide for designing and teaching a service-learning course." In C.R. Hadlock (Ed.), *Mathematics in service to the community: Concepts and models for service-learning in the mathematical sciences*. Washington, DC: Mathematical Association of America.

“Service-Learning and Mathematics” webpage:
<http://www.math-cs.gordon.edu/~kcrisman/SLTalks/>

Bailey, B. & Sinn, R. (2011). “Real Data & Service Learning Projects in Statistics.” Service-learning in collegiate mathematics, MAA contributed paper session, 2011 Joint Mathematics Meetings, New Orleans, LA. Accessed through “Service-Learning and Mathematics” webpage: <http://www.math-cs.gordon.edu/~kcrisman/SLTalks/>

Hydorn, D. (2011). “Community Service-Learning in Mathematics: Models for Course Design.” Service-learning in collegiate mathematics, MAA contributed paper session, 2011 Joint Mathematics Meetings, New Orleans, LA. Accessed through “Service-Learning and Mathematics” webpage: <http://www.math-cs.gordon.edu/~kcrisman/SLTalks/>

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Hadlock, C.R. (2013). “Service-learning in the mathematical sciences.” *PRIMUS*, Vol. 23 (6), pp. 500-506.

Other

Harry, A. & Troisi, J. (2014). “Service-Oriented Statistics.”
<http://stattrak.amstat.org/2014/08/01/service%C2%AD-oriented-statistics/>

Hampton, M.C. (1995). Syllabus for Intro to Statistics. University of Utah.
<http://evergreen.loyola.edu/rcrews/www/sl/syllabi/hampton107.html>

Duke, J.I. (1999). “Service-Learning: taking mathematics into the real world.” *The Mathematics Teacher*, 92 (9), pp. 794-796, 799.

Leong, J. (2006). High school students’ attitudes and beliefs regarding statistics in a service-learning-based statistics course. Unpublished doctoral dissertation. Georgia State University.