

Teaching Ethics Using Reflective Service Learning

Erin Griesenauer
Eckerd College

MathFest
August 1, 2019

Outline

RSL is a way to incorporate ethics into any (mathematics) course that requires little class time and little not too much preparation.

- 1 Set Up - What does RSL look like?
- 2 Goals of RSL
- 3 Challenges and Strategies for Overcoming Them
- 4 Conclusion

Why I Chose RSL

On campus:

- Students required to complete RSL course
- Not many options, especially for science majors

In the community:

- Large school district
- Persistent inequality among local schools
 - Documented by the Tampa Bay Times in the 2015 Pulitzer Prize-winning series “Failure Factories”

Set Up

- RSL component was incorporated into two sections of Calc II, each with ~25 students
- Students required to complete at least 10 hours of service throughout the semester (14 hours for full credit)
- Also required to reflect on their experience by participating in class discussions and writing a reflection at the end of the semester
- Flexibility for how to complete these hours: required to spend time tutoring/mentoring OR completing mathematical outreach projects

Where They Volunteered

Opportunities Arranged by Me:

- Academy Prep Center (middle school)
- St. Petersburg High School
- ~~Bay Point Middle School~~
- *On-campus tutoring for Precalculus and Calc I courses
- *Pi Day celebration

Opportunities Arranged by Students:

- YMCA Y-Achievers program
- YMCA Reads program
- Tutoring for math classes at local community college
- Tutoring at alma mater over Spring Break

Goals of Reflective Service Learning

Academic Goals

- *Review material from past classes*
- *Gain a deeper understanding of the material by teaching it*
- *Practice communication skills*
- *Practice problem solving skills*
- *Build confidence*

Goals of Reflective Service Learning

Ethical Goals

- *Interact with students from diverse backgrounds*
- *Become more aware of social issues that impact education and educational opportunities*
- *Identify problems related to mathematics education (and education in general) and consider possible solutions*

Reflection Questions

- *What did you observe and do? Did anything in particular stand out about your experience?*
- *What did the experience make you think? What have you learned about yourself (your abilities, strengths/weaknesses, etc)? Has this experience changed your thinking? How?*
- *What type of impact do you think you had? How did your work fit into the larger context of our community? How well does it serve the people that it is trying to reach?*
- *How did the experience contribute to the goals of RSL listed in the syllabus? How did your experiences help you practice communication skills? How did it better your understanding of social issues related to education and educational opportunities?*

Strategies for Finding Opportunities

- Start early, a couple months before you want students to get started.
- Don't need to create opportunities, rather you need to find them.
- Use your campus Service Office to find contacts at schools and other organizations
- Try to find opportunities outside of public schools: after school programs like YMCA are better.
- Talk to parents on campus to see what organizations they know about.

Strategies for Finding Opportunities

- Find lots of opportunities at a wide variety of times
- Don't feel pressured to find an opportunity for all students—some will find opportunities on their own.
- Expect frustration: it will take a couple of tries to find the right person to talk to, and some organizations will back out.

Strategies for Working with Public Schools

- Initially contact principal
- Background Checks:
 - Plan for this to take time
 - Start the paperwork before the semester starts, if possible
 - Make sure you understand the process and know who to contact at the district level
 - Find money on campus to reimburse students
- Because of school schedule, it will work best if you start in the fall semester.

Strategies for Dealing with Student Concerns

- Consider students' schedules when drafting requirements and finding opportunities. For my students, afternoon times during the week where most popular.
- Not all students have cars:
 - Find places that want a groups of students to come together so they can carpool.
 - Try to find programs that are walking- or biking-distance from campus.
 - Have some opportunities on campus.
- Have some more flexible options: Pi Day event was in part a way for a student athlete to get her hours.

Strategies for Motivating Students

- Let students know when they register for the class that there is an RSL component
- Make your expectations clear on the first day of class
- While you're at it, emphasize penalties and explain the goals of RSL on the first day of class
- Encourage students (repeatedly!) to get started early!
- Carefully consider how much RSL hours and reflections will contribute to semester grade

Some Non-Challenges

- Everyone completed their hours!
- Student discussions were productive
- After students got started, it took basically no additional class time
- Recording hours was easy

Reflections on Impact of RSL

Based on discussions and reflections, I believe that RSL achieved all of my goals for at least some of the students.

- Many students reported more awareness of social issues related to education and educational opportunities
- Of those, many expressed a want to continue helping in the future
- Not all benefitted from academic goals because some tutoring opportunities were “open” tutoring sessions: even though they said they wanted math tutors, they really tutored in all subjects
- Unexpected: Many said that RSL taught them patience

Thank you!