

Service Learning in the Sciences: Student perception before and after working with a community partner

Background

- The integration of service learning into a course can improve the learning experience (Markus et al. 1993)
- Service learning projects are not commonly integrated into natural science courses and are used to a limited degree, but have been reported to improve student learning (Kennell 1999)
- Service learning can be used as a mechanism to apply course concepts in a real world setting that is difficult to mimic in a laboratory exercise
- Civic engagement provides first-generation students or students from under-represented groups with exposure to potential role-models or mentors who share a common background
- A service learning assignment was integrated into a general Biology course for non-biology majors with 89 students enrolled
- High proportion of students on the WSU Vancouver campus are non-traditional students with an average age of 26 years
- 44 percent are first generation students and 7 percent are veterans
- Many work full time and have families

Questions addressed before and after a community partner work

1. Do students perceive civic engagement as rewarding?
2. Is service learning perceived as beneficial to their education?
3. Do students expect to contribute to their community from a service learning project?

Methods

- Required service learning assignment was based on principles from Howard 2001
- Students engaged with 16 different community partners in SW Washington
- Minimum expectation of working 10 hours with a community partner
- Work with a community partner had to overlap with some aspect of course content
- Students submitted an expectation of participating in a service learning experience assignment at the beginning of the semester, a final reflection assignment at the end of the semester, and a short oral presentation
- An optional Likert-scale survey was provided before students worked with a community partner (pre-assessment) and after they completed their work with a community partner (post-assessment)

Results

Perception of reward (Fig. 1)

- A 20.6 % decrease in positive expectation of reward was reported after working with a community partner

Benefit to their education (Fig. 2)

- Perceived benefit of service learning to a student's education decreased by 30.1 % after the assignment was completed

Contribution to the community (Fig 3.)

- Majority of students expected to contribute to their community (96.8 %) and perceived a contribution to their community at the end (85.1 %)

Figure 1. Service learning project pre- and post-assessment survey data to address whether students perceive their work with a community partner to be rewarding A) before working with a community partner and B) after working with a community partner.

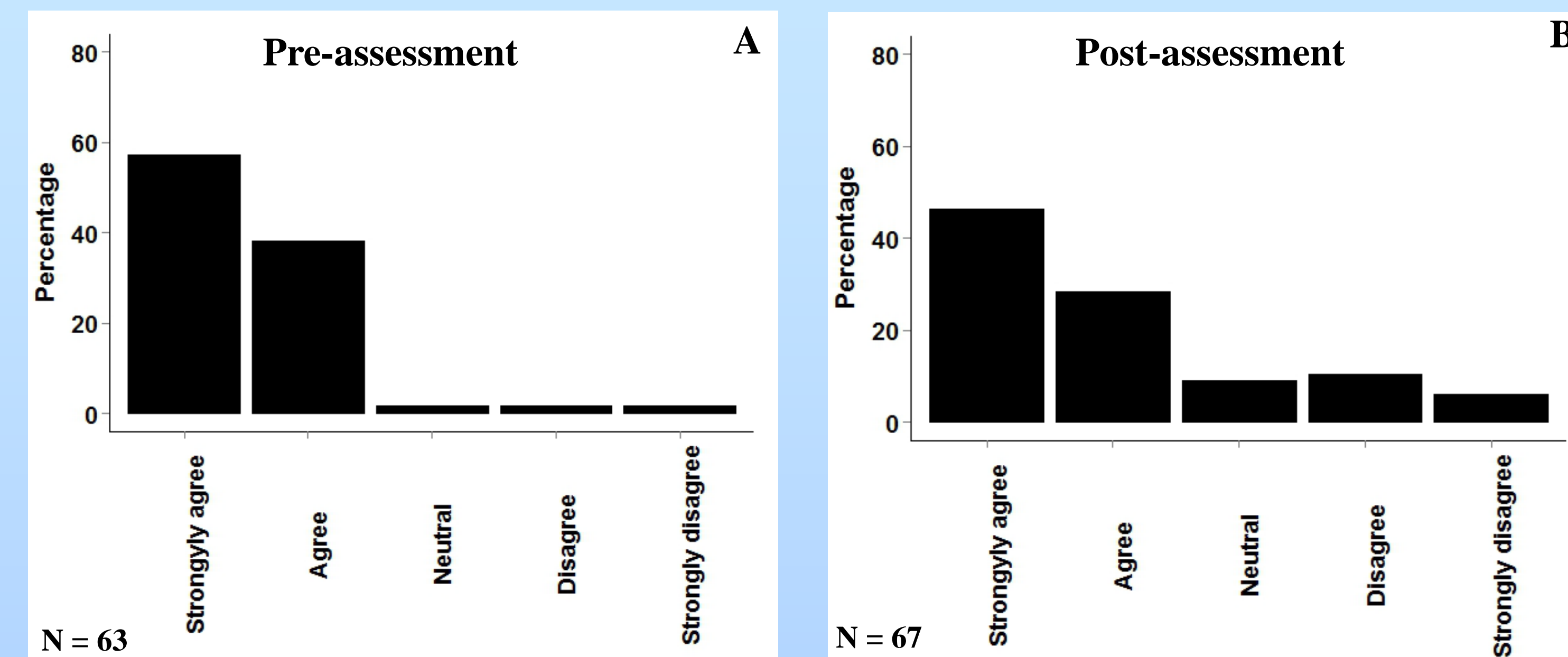


Figure 2. Service learning project pre- and post-assessment survey data to address whether students perceive their work with a community partner to be beneficial to their education A) before working with a community partner and B) after working with a community partner.

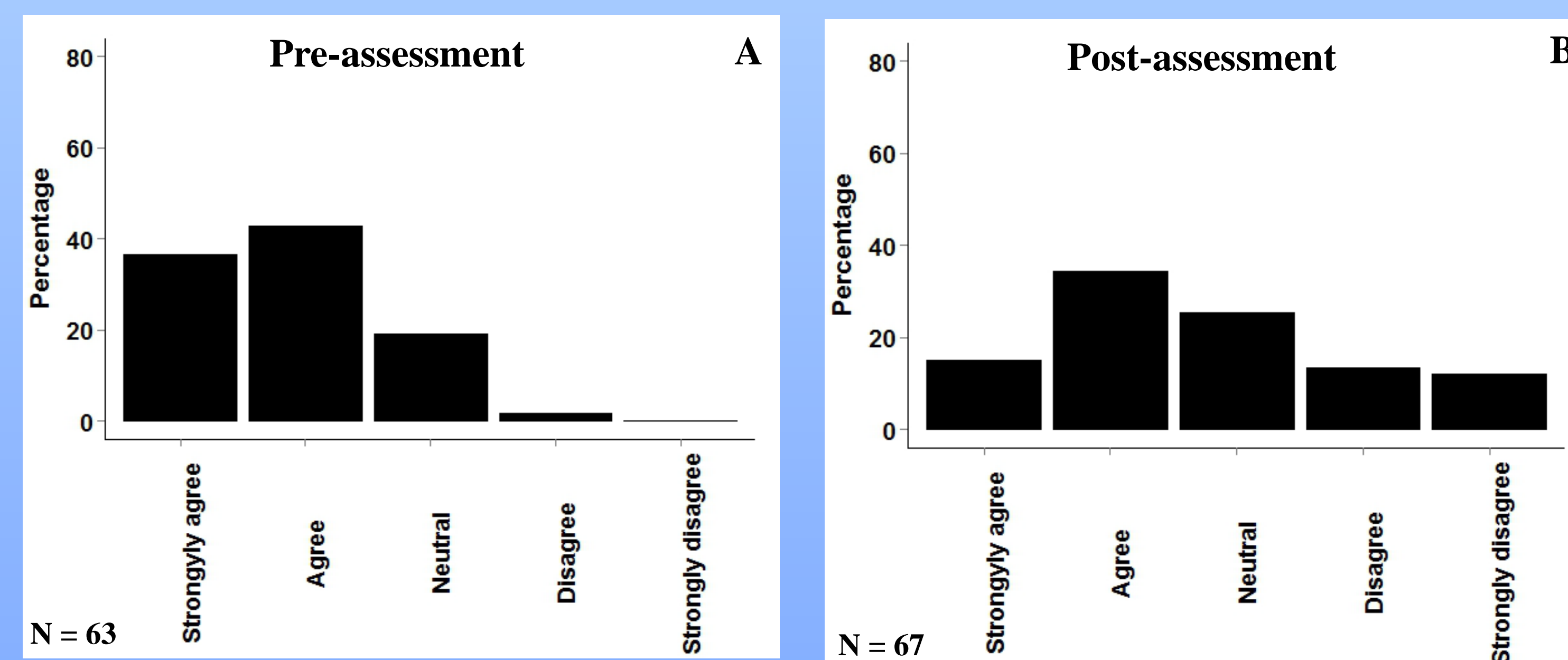
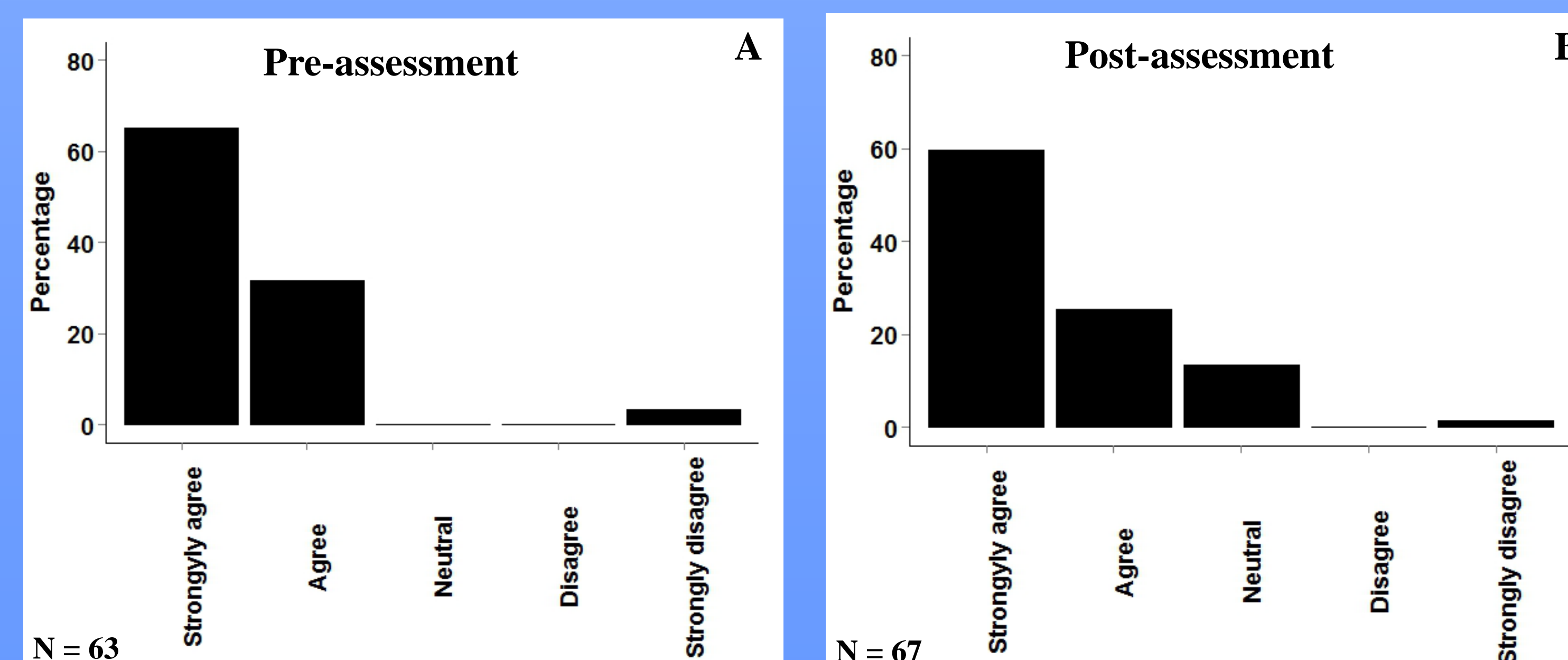


Figure 3. Service learning project pre- and post-assessment survey data to address whether students A) expected to contribute to the community and B) contributed to the community, before and after working with a community partner, respectively.



Conclusions

- Reflections and presentations suggest that students gained from the experience
- Despite a post assessment decrease in perception of reward and benefit, the majority of students perceived a contribution to their community
- 62 percent of students indicated they would work with a community partner again and 20 percent were non-committal
- Multiple students indicated that working with a community partner was a humbling experience
- An example of a student response was that working with a Community Partner provided a “sense of pride and accomplishment”
- Students indicated they are willing to work with a community partner, but when more time is available
- Providing as much work flexibility (i.e., diversity of community partners and timing of work available) as possible with community partners can improve the student experience
- For example, the addition of more community partners mid-semester provided additional opportunities for students
- Working with community partners to develop “family friendly” opportunities would assist non-traditional students with families

Literature cited

- Howard, J. 2001. Service-Learning Course Design Workbook. Michigan Journal of Community Service Learning. University of Michigan OCSL Press, pp. 16-19.
- Kennell, J.C. 1999. Educational Benefits Associated with Service-Learning Projects in Biology Curricula. Life, Learning, and Community: Concepts and Models for Service-Learning in Biology.
- Markus et al. 1993. Integrating Community Service and Classroom Instruction Enhances Learning: Results from an Experiment. Educational Evaluation and Policy Analysis. 15: 410-419.

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