

Peer to peer tutoring and Library student employees improve retention in Math at the University of Oregon Libraries

Project:

The Math Library is a small branch in a large academic library system. When the building was gutted for a retrofit, we worked with the co-located Math department to offer drop-in homework help. We now hire undergraduate students with strong math and teaching skills to help with library services and help patrons with homework. We created a dynamic community of learning in the redesigned space that has revitalized the Math Library.

The popularity of the homework help service exceeded our wildest expectations, we've also created an intellectual community beyond that.

The **impact** on the campus is at least three fold.

1. First, the undergraduates who are taking math classes have another place to get help free of charge. We maintain our services helps **student retention** and it improves morale. Math is a foundation for other STEM classes.

2. The students working in the Math Library are getting **meaningful employment** in the library system. We made a point of making the hourly rate of pay as high as our system allows for their specialized skills. Student employees work for the library, but they have a deeper connection to the Math Department too, as they learn more about teaching math and because they are in the department regularly. Students practice teaching a range of material to students. They also learn what libraries do, by helping with interlibrary loans, shelving and getting books for patrons.

We have done our best to hire the strong students, who are respected by their classmates. By doing this, other strong students, with good study habits, come by to work on their own assignments, to be around and help create a place where we do math. Some of the library student employees play math games when it's slow and enjoy trying to stump their co-workers.

The students who work at the Math Library have gone on to graduate school and have gotten jobs that use their math skills. One of them has even become a library donor, which is wonderful. By creating a network of students based on a shared work experience and set of skills, they have helped each other with work opportunities after graduating and continued to support each other socially. I think of this a multiplier effect, where the community we create continues to help the students who worked in the Math Library.

3. Thirdly, the Math Library has seen a tremendous boom in **space use and the resources**. Data from before the renovation is mostly anecdotal, we know usage was low. Gate counts show that we see approximately 45 users per hour in in the afternoons in a space originally designed for 15-20. During the 2012 Fall academic term, approximately one in seven students enrolled in lower-division math classes used the service. During the first 5 weeks of Spring term 2012 we helped approximately 9% of the students enrolled in the Math 95 through 200-level courses. We quickly increased the number of student hours to 18 a day during the academic term distributed over 15 student employees. We are now open 6 days a week.

The model has been so successful that other science departments want to duplicate the same kind of program and we hope to provide more opportunities of this kind.

For more information contact:

Annie Zeidman-Karpinski, Science and Technology Services
Librarian

Lara Nesselroad, Math and Science Manager

<http://blogs.uoregon.edu/annie/math/>