The Quantitative Skills Center at The University of Washington Bothell

In each issue of the NNNNews, we will highlight a QL program or center through an interview with the director. Our second interview is with Cinnamon Hillyard at the University of Washington Bothell, Bothell, WA

A short description of the Quantitative Skills Center

The mission of the Quantitative Skills Center (QSC) is to support students, faculty and staff in any area that requires quantitative reasoning. Our QSC was created in order to facilitate the UWB mission to develop critical and analytical thinking as well as problem solving skills. Our primary goals are:

- Serve as a place for academic support in quantitative areas. We provide tutoring, workshops, and classroom presentations to support this goal.
- Promote quantitatively literate citizens through nurturing critical thinking with respect to numerical arguments.
- Act as a sounding board and encourage students, faculty and staff to "talk out" their quantitative ideas, techniques, and analysis.
- Provide evidence that any one can learn math by presenting resources and tools to faculty and students across all disciplines, cultures, and lifestyles.

The QSC has a full-time director, part time office assistant, and 7-8 student tutors. We are open about 50 hours per week (two tutors at a time).

Q&A

1. How long has the program at University of Washington Bothell been running and what were the original reasons for its creation?

The University of Washington, Bothell (UWB) branch campus was established in 1991 to provide increased access to upper division education for Washington residents. Writing across the curriculum was a core value of the founding faculty and part of the design of the campus' interdisciplinary philosophy from the beginning, and a writing center was created to support students in the writing intensive curriculum. As the campus grew, it became clear that a similar model for integrating mathematics and statistics across the curriculum was needed, and a corresponding physical space would need to be established where students and faculty could receive support for quantitative issues. So, the Quantitative Skills Center (QSC) was born in August 2000 as a sister to the Writing Center to support both faculty members in integrating quantitative components into their curriculum as well as students learning those components.

2. What is the primary function of the center for your institution, and how closely do you feel its current function matches the original reasons for establishing it?

The primary function of our QSC is to support faculty and students with anything quantitative. We do this by collaborating on curriculum design with faculty, making

presentations and teaching in courses across all programs, providing free tutoring to students at all levels, and offering quarterly workshops on quantitative technologies (such as MS Excel and SPSS). We believe this is a good match to the original needs and reasons for establishing it.

3. How long did it take for the center to become an established part of the structure of UW Bothell?

Because the faculty came up with the idea for the QSC and because the Writing Center was already a part of the culture at UWB, it did not take long for the QSC to be recognized as a key part of our institution. However, encouraging more faculty to integrate QL into their curriculum continues to be a challenge. Although our faculty value QL, the integration of quantitative pedagogy is not always clear, especially compared to writing. So, taking time out of an already busy schedule to develop new, unfamiliar curriculum takes some convincing.

4. What steps did you take to make that happen?

Keeping QL and the QSC on people's minds is the secret to our success. I try to be open, proactive, present, and available. For example, I

- work on committees related to teaching and learning
- attend faculty meetings
- review class schedules and corresponding syllabi looking for links with the QSC
- approach faculty with funding opportunities
- seek input from and implement ideas suggested by students, tutors, staff, and faculty
- work with peers in the Writing Center and library on common goals
- recruit tutors who share a love for math and learning
- 5. What's the best way for faculty to interact with the center?

There is no "best" way. I try to find multiple ways to make the QSC a valuable resource for faculty to use as needed. I keep an open door so that they can stop by anytime for anything. I also go to the faculty for advice, assistance with tutor training, and feedback. Finally, I participate as much as possible as a faculty colleague by joining campus discussions on teaching and research. These practices enable faculty to interact with the QSC as they best see fit.

6. How does the center interact with other institutions?

One fortunate thing about this position is that it came with a small bit of travel money. So, the QSC interacts with other institutions mostly by the director attending regional and national meetings about QL. I've also informally tried to seek out and tour peer math centers and QL centers in the area and have worked on some cross-campus committees about QL.

- 7. What are the three (or four) most important things needed to make a center function well?
 - Administrative support: The QSC and my position are permanently funded by state dollars. This ongoing support is essential to sustaining good work and making long-term goals. We do have some supplemental funding by temporary grant dollars, but a solid commitment from the university gives us firm ground to stand on.
 - Faculty support: Students are referred to the QSC primarily by their instructors. If faculty are not on board with our goals and mission, they and their students will not support the QSC. It is essential to keep them in the loop and continuously seek their input.
 - Proactive and connected Center leadership: My position is both academic and administrative. I am funded and supported to keep up on everything quantitative, both on and off campus. I spend a lot of time working with faculty, reading the latest literature, attending meetings, and participating in national discussions around QL.
 - Ongoing tutor training and feedback: Tutors and staff are key to the day-to-day success of the QSC. Ongoing training is a must. Although all of the tutors have a great deal of quantitative skills in their tool belt, few have thought about tutoring these skills, teaching peers good learning habits, and developing QL in others. Another part of successful tutoring comes from treating tutors as peers in building something new. I regularly seek their feedback to improve the QSC, and their feedback has proved to be invaluable to its growth and success.

Cinnamon Hillyard has a PhD in Mathematics from Utah State University. She held a Teaching post-doc at the University of Arizona and has worked at the QSC since August, 2000.

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