

Research Assistance Linked to Student Retention

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WHEN WE AT DALHOUSIE University in Halifax, Nova Scotia first heard about the Assessment in Action (AiA) program, we had just discovered that our student retention rate was the lowest in the U15 (Dalhousie's peer group of top fifteen research-intensive universities in Canada). Instead of measuring the effect of current services on retention, we undertook a literature review and decided to create a new “intervention” type of service. The plan was to identify a group of at-risk students and create a program of mandatory Research Assistance (RA) specifically for them. We considered several potential student groups. Our pilot project eventually focused on a small, specific set of at-risk students: readmitted students in the Faculty of Arts & Social Sciences (FASS). These students were academically dismissed after their first year, appealed their dismissal, and were granted conditional re-admittance to the university.

Settling on program design and assessment methodology was challenging. We acknowledged at the outset that this would be a learning experience and that in the end the effort was for a good cause. We labeled our Dalhousie Libraries Research Assistance Program (DLRAP) as a “seed

project.” This meant the program was fledgling, and through assessment and support would grow and improve over time.

Why did we specifically choose to implement an RA program for readmitted, at-risk students? Like most things, it started with a hunch. We had a feeling, based on our interactions with students while providing RA, that we are doing a good thing. By assisting them with research related to their graded research papers, we are teaching them how to effectively source and evaluate scholarly material so they can produce better papers and succeed academically. Also, it seems that in this RA role, we are like the “bartenders” of campus. Students talk candidly to us about their academic work and their experiences in university. Afterwards they seem to walk away relieved and rejuvenated. With this hunch that we are establishing personal connections with our students and helping them succeed academically through RA (and how could this not lead to better chances of retention?), we reviewed the extensive literature on retention. From this we gathered two takeaways: 1) academic success is the strongest factor affecting a student’s decision to remain at university, and 2) it is important that students develop personal connections with members of the institution. This confirmed our choice of creating a mandatory program for our readmitted FASS students to participate in, something we already did on a regular basis: RA. Our next step was to determine how we would assess the impact of the RA on the retention of these students.

Choosing the Methodology

Academic success can be defined and measured in many different ways. At one point, it was suggested to us that we only focus on grades of research papers, rather than overall grades (i.e., GPAs). We felt that the impact of obtaining information literacy skills (as students do during RA sessions) has far-reaching beneficial effects beyond the writing of a single research paper. Plus a grade on a one-time research paper didn’t give us a starting point from which to measure impact. We wanted to measure *improvements* in grades, not grades in general. Using GPAs also provided us with a natural “control” group: the readmitted students who did not participate in the program (we couldn’t really enforce the “mandatory” measure). We did acknowledge that there was only so much we could control for in this group—more on that later. Therefore we decided to measure the average

change in GPAs, from the last year to the end of the current academic year. With that data we could then compare the changes in GPAs of those who participated in the RA program and those who did not.

We also chose to survey the participating students by asking them if they felt the RA program benefited both their grades on their specific research papers, as well as on their overall grades (or GPA). The results would provide some triangulation to the GPA analysis. With the survey we could also tackle the assessment of the personal connection that we felt that the one-on-one RA gave the students.

There are several ways of asking the participating students these questions. We could have held focus groups or conducted individual interviews. However, given the sensitivity around academic performance we felt the need to protect the students' privacy regarding this rather personal issue. An online survey was preferable to a focus group which placed the students together in one room and required them to reveal to others that they had failed their first year of university. Gathering these students together in one physical location at the end of the academic year we felt would also be a challenge. Alternatively we could have conducted interviews. As we found when we were registering and scheduling RA appointments with these students, they were very difficult to get in touch with.

In the end, it was an online survey that we went with. Most of the survey questions were open-ended, even if the question could be answered with a general yes or no. We wanted to allow the students the opportunity to say anything. The survey was emailed to each student with the plea that it was our first year to run this program and we really needed their feedback. The survey served the assessment purpose, but also allowed us to gather suggestions on how to improve the program. In the end, we gained so much insight out of this survey!

How Did It Go?

Overall, both the GPA and survey assessment methods were suitable and effective, given the limitations of our project. The survey received a good response rate with over half the twenty-five RA participants responding. Although the survey target group was small, being a seed project meant that we were only looking for results *compelling enough* to support growing the project. We achieved that goal. Since most of the survey questions were

open-ended, the results required some qualitative analysis—coding of the results. As it was a small respondent group this was an easy task.

The last question on the survey asked how else the RA program affected the student and her/his studies. The students surprised us. Despite being an open-ended question, there was considerable consistency in their responses. Over half of them stated that the program gave them confidence. This was an effect we hadn't really thought of. Knowing that our students are walking away from RA sessions with us feeling confident to do their work, gave us more reason to continue the good work we do. It also echoed the findings I later read in First Year Experience literature: confidence fluctuates in a student's first year and can have a significant impact on their academic activities.¹ Had we anticipated a significant increase in confidence as a potential side-effect, pertinent to the retention of students, we may have measured it as a closed-ended, multiple choice or scale question. It is something we will consider when we run the program again in 2015–16.

Another thing we will consider is not making the survey anonymous. As we analyzed the responses, we felt it would have been helpful to know a little more about the respondents. Which respondents had the highest GPA increases? Which respondents attended both RA sessions (there were two); which attended only one? (We kept track of all this information separately.) Which ones came with assignments in hand, upon which to base the session? (We found that a third did not and this correlated with lower GPA changes.) If we want to keep the survey anonymous, it will at least be helpful to conduct two surveys: one after the first RA session, and one after the second.

The survey was also helpful in that it provided triangulation on the question of whether or not the RA sessions impacted their GPAs. By the students indicating in their survey responses that the sessions did so, it gave strength to the correlation shown in the GPA analysis. The GPA analysis showed that those who attended both RA sessions improved their GPA more so than those who attended no sessions (an average increase of .371 vs. .196). Note that the GPA analysis revealed a correlation, not causation. From reading the retention literature we know that there are a multitude of compounding factors affecting a student's ability or choice to remain at their studies at their institution. Since our study cannot control for many factors affecting academic success, we can't test for causation. So for now our assessment will have to rely on correlation, not causation.

While many of us work for educational institutions where research is very important, we have to remind ourselves and others that assessment is not research. We aim to live up to the rigors of research, but we are measuring things not in a lab, but in real, messy, complicated life. We knew at the outset of this project that we simply could not control for the myriad of factors that affect both academic success and also a student's personal connection to their university. However by providing evidence compelling enough, we could grow this project and with each successive year add to this persuasive body of evidence.

Recommendations

The first year of our DLRAP program for readmitted FASS students was followed by my sabbatical, so DLRAP was not repeated in the 2014-15 academic year. We documented our lessons learned and how we would do things differently the next time. At the time of this writing, we are preparing to conduct DLRAP for the coming academic year (2015-16). I am revisiting our recommendations, accompanied with new knowledge based on some sabbatical research, membership on campus-wide retention strategy teams, and attendance at my first First Year Experience Conference.[¶] My first major recommendation for Dalhousie going forward and to other libraries considering a similar assessment project: have your institutional research (Analytics) office assist you or take over any analysis of GPAs. At the time of the DLRAP project, our Analytics office did not have the resources to help us. The office has since expanded and I will be making use of their expertise. Within their institutional databases, they can most effectively track grades and record various student data, including involvement in campus programs. The Analytics office will also employ approved methods for accounting for changes to past GPAs as the result of repeated courses. They may be able to advise on better quantitative assessment methods as well as have access to term grades and other relevant student data. The Analytics office may also make it possible to track survey responses by student IDs mapped to level of participation in the program. There's a lot this office can do that I am not able to, due to lack of expertise, access to data, and privacy restrictions.

[¶] I recommend this conference to librarians interested in developing programs or in simply getting involved in campus-wide retention efforts.

The results of our assessment study showed that those who had assignments upon which to base their RA session improved their GPAs, whereas those who did not flat lined with no improvement at all. Therefore, I recommend working with faculty in the courses taken by the participating students to develop research assignments. These need not be lengthy, but at the very least be a challenge to the students. This will allow the students to experience “earned-success”, and receive RA from us that resonates with their academic work. At the time of this writing, we have developed a partnership with a campus-wide remedial program that most of the readmitted FASS students will be taking. We are designing an assignment to be administered in the program for which the readmitted students will base their first RA session on.

As discussed earlier, we are going to consider intentionally measuring the effect DLRAP has on the students’ confidence in a survey. We are also currently planning on running two surveys—one after each of the two RA sessions—to effectively measure the impact and gather feedback on each session separately. We will know soon enough if this was an improvement to our assessment methodology.

Overall, larger numbers are more compelling. With the success of DLRAP’s first year, we must expand on the program. Currently, we are repeating it with FASS, but interest in it is growing from Dalhousie’s Engineering retention office. Larger groups of participants means more data. Especially when it comes to correlation, larger data sets and repeated correlation makes for a more compelling argument to support your service. We also need to track both the participants and control groups to degree completion—whether they complete their degree at Dalhousie and the number of years it takes them.

In conclusion, assessment of library services is essential. This is particularly true if the service is fledgling and needs to be “sold” to library or university administration for support and resources. I hope our experiences doing so with a project we feel is for the greater good will help you with yours.

Notes

1. Community College Research Center (CCRC), “I Came in Unsure of Everything: Community College Students’ Shifts in Confidence,” by Susan E. Bickerstaff Melissa Barragan, and Zawadi Rucks-Ahidiana, CCRC Work-

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Further Reading

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