TRACK CHANGES:

How a PUI Uses Data to Improve Internal Grant Programs

By Patience Graybill Condellone, Esther Erkins, and Susan Morgan

For sponsored research offices (SROs), external grants dominate the annual report because external grants comprise the SRO's basic purpose. Internal funding programs are often dwarfed by the responsibilities accompanying externally sponsored projects, especially at primarily undergraduate institutions (PUIs) with few staff members. However, internal grants are popular mechanisms by which to offer seed funding for promising research and to train faculty seeking external support. It is worth our effort to create internal programs with a high payoff. Data can help us understand how best to structure and revise these programs to do so.

The decision to collect data on internal programs is informed by how your institution defines success for the programs. Using data to track the outcomes of internal grant projects allows administrators an overview of the outstanding results internal funding has provided, and lends them tools for discussing successful research. Such data also provides excellent fodder for annual reports and publicity! Yet what you seek in the data will change according to how your institution interprets the role of research on your campus. Are you looking for strong scholarly impact on the field? What evidence can be provided in this arena; is it presentations, publications, or awarded grants? Are internal programs successful when your grantees win more external dollars than originally invested, or do they prevail only when a high percentage of the resulting external submissions are awarded? By articulating such priorities, institutions can more easily shape internal programs and how to collect information about them.

earning to gather appropriate data can allow research administrators to make better informed decisions and bring concrete evidence into conversations with key partners. This article outlines the journey of one PUI to improve internal grant procedures and enhance tracking methods. We will articulate lessons learned about gathering data and using it to assess internal programs.

SIUE Grant Programs

At Southern Illinois University Edwardsville (SIUE), we have the rare ability to support several internal funding mechanisms. There are a range of programs, including seed grants, outstanding researcher awards and resubmission support. Because indirect cost recovery funds support our programs and there is an institutional mandate to increase external sponsorship, we must show the effectiveness of the internal grant programs in achieving external support.

Information-gathering about our programs takes various forms, and our methods have evolved over the last 5 years. The "data" we use to assess our programs includes statistical data on applicants and reviewers; feedback from individuals involved in the process; procedural notes and information from various tracking-points in our grant procedures.

In 2010 we began tracking project outcomes gathered from final reports. We now have 5 years of data, which has helped create a picture of our awardees' productivity and results stemming from internal programs.

Why the Need for Data?

Creating a systematic practice for tracking data provides an important weapon in assessing program effectiveness and finding intervention points. Data also becomes an ally in showing how your office initiatives contribute to the university enterprise.

Getting back to the basics: Re-examining guidelines and goals for the funds

An administrative change in our office between 2010 and 2011 led us to closely examine our existing internal grants. A re-evaluation of our program guidelines helped inform the eventual changes to data tracking. We had previously emphasized the "seed" aspect of our largest program, i.e., the need to support "new" rather than ongoing research, as well as projects that could be competitive for external funding. However, we found several trends that influenced our data points. The trends were: 1) the same faculty members were returning to internal programs to get summer support and maintain their research; 2) multiple individuals never finished their external submission requirement; and 3) external grant submissions were not successful.

Therefore, guidelines were revised to address these issues. Other changes in the guidelines included a cap on total summer salary to discourage reliance on the internal grant for summer salary and adjusting the weighted evaluation criteria to give a higher percentage value to the "potential to receive external funding." Such changes were justified to our research oversight committees through information culled from our database and final report data.

Aligning baseline data with university strategic goals: Improving final reports and data collection

In 2013-2014, the increased emphasis on external funding support in our university strategic goals raised the bar in terms of what was expected for externally-sponsored projects. Goals include increasing the number of submissions and awards, the total funding requested and received and the percentage of tenure-track and tenured faculty pursuing external funding. Through the articulation of these "key performance indicators" (KPIs), it has become more important that our internal programs enhance the external funding potential of our research.

Data-gathering tools and procedures also became more important. In 2010, we had established an online final report using Qualtrics survey software. This enabled a more convenient and extensive means of collecting data from awardees. If needed, the data points can be modified, but the information has been relatively consistent across the years to allow comparison over time. We have also expanded our database to include more refined data points.

What Types of Data to Gather and How?

The data gathered has changed slightly in recent years; however, we can state that we currently gather demographic and disciplinary information on the applicants to provide a statistical picture of applicants; and we track reviewers' disciplinary background. (Reviewer data can be handy when disgruntled rejected applicants challenge the process.)

We collect annual reports from most of our awardees 90 days after the end of the project period. Typical final report surveys ask awardees to self-report on project outcomes, such as publications, presentations, associated external grant submissions and awards, student outcomes (if the award includes students), creative activities, scientific outcomes, patentable products, outreach, or other activities affiliated with the project and actual budget expenditures.

Faculty self-reporting is one mode of data collection, but we have not relied solely upon it. We have opted to limit its use due to inaccuracies in the reported information when compared to the SRO's database. Consequently, we built in quality controls which allow us to cross-check final report information with our database. Since eligibility for future internal funding is contingent upon an external submission, application deadlines become a prime opportunity to talk to applicants about updating external grant information and/or strategies for meeting previous internal award requirements.

The outcomes information from final reports and cross-checking have allowed us to build trend data that informs our streamlining efforts. This information ultimately becomes evidence in our annual reports, illustrating how internally-funded research projects contribute to the mission of scholarship, teaching and outreach. Furthermore, the data creates a picture of budding research and PIs we can target to develop the aims laid out in our university strategic goals.

Interpreting the Data for the Future: (Re)-Defining Success?

Data collected about past research internal grant awards can inform how you move forward toward your ideal programming results. At SIUE, goals are squarely focused on promoting external sponsorship. We are particularly interested in getting the most out of the internal grant investments by translating them into higher success rates with external funders.

Thanks to the new baseline data, mapped in response to the research KPIs, we are able to look more intently at the yearly comparative data to determine if we are getting the right "bang for our buck" from internal awards. We can track how a particular cohort performs compared to another, but we can also track how a particular cohort's external grant performance changes in the 2 to 3 years following the project end date.

This may, for example, provide us with a better picture of how long it takes for internally funded projects to achieve external support.

In viewing our 5-year data, we have found that some of our major programs are earning more in external dollars than we originally invested. At the same time, we have been able to perceive weaker funding programs and lower-than-desired external funding success rates. We have articulated that an external submission requirement does not necessarily translate into a strong external award record, and we have begun looking into ways we can further support our internal awardees in their bids for other funding after the internal grant ends.

We are asking ourselves if we need more outreach to internal awardees as they prepare the final report; for example, assisting them to think ahead to the external funding requirement. Do we target our efforts to the higher scoring awardees? Or do we, perhaps, target applicants not funded through internal programs and encourage them to transform rejection into an opportunity to connect with external funders?

These are just a few ideas that have arisen from our preliminary trend data, and how we move forward will depend on not only how we can best use our resources but also what future data reveals the effects of our intervention strategies have been. N

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