

Motivating Factors and Obstacles behind Grant Research: The Case of a Teaching Focused State College

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Abstract

Faculty motivation to seek external funding includes the ability to conduct research and offer innovative programs and bring prestige and support for universities. However, faculty may decline to participate in the grant-seeking process. In order to better understand the reluctance of faculty to pursue grants, faculty in the College of Education at a Southern state university were asked the following questions in a case study: 1) What motivates you to pursue external funding? 2) What factors may pose an obstacle for you to engage in grant writing? and 3) What recommendations do you perceive as needed for you to engage in this activity? The findings indicated that the main motivating factors are freedom in conducting research (88%), freedom in research topic selection (84%), and ability to hire student workers and other faculty and staff to assist in research (77%). Among the obstacles, time was found to be the most challenging obstacle (80%). Many faculty members also agreed that lack of technical guidance (45%) was a common obstacle. Several suggestions were shared to support faculty grant writing. These include implementing policies to incorporate and value grant writing in the tenure process, conducting needs assessment, and creating faculty liaisons for the college.

Keywords:

Grant Writing, Higher Education, Faculty, External Awards, Barriers to Grant Writing, Positive Reasons to Pursue Grants, External Funding

Introduction

Grant writing has historically been a pursuit among academic as well as non-academic institutions in order to fund their projects and research activities. Reasons for this vary from permission to pursue specific scholarly interests to creating, piloting, and implementing an entirely new scientific method or procedure (Lawrence, 1995). This is true not only in Science, Technology, Engineering, and Mathematics (STEM) fields, but the social sciences have also acknowledged the advantage of grant funding to support research activities. There are many sources of funding, governmental as well as private. In order to obtain support from grants, researchers have to communicate to grant funders that the money will be well-spent and that the recipient will report to the funding agency regarding the research as well as the stewardship of the funds.

Research and writing have traditionally been essential to tenure-track faculty in order to continue in the academy (Boyer & Cockriel, 1997), and this of course remains true today. The rewards of grant research stem not only from monetary support, but they also extend to the financial health of colleges and universities where faculty serve. For these reasons, the pursuit of external funding, while always being important, has gained an impact in the academy in light of budget cuts and increased emphasis on efficiency (Daniel et al., 2006). Grant-sponsored research activities allow faculty to have summer release time from teaching duties, hire graduate students to help with research activities, and acquire valuable resources for this creative scholarly activity.

Unfortunately, there are many hurdles to the attainment of a grant award. Because external funding is an added boost to faculty careers as well as to the university's prestige, it is essential to bring these blocks and challenges to light. While this is part of good business practice, the type of needs assessment survey used in this study has not been conducted before at this college. This case study explores the motivations and obstacles for faculty pursuing funding. Its purpose is two-fold. First, it aims to describe the most challenging obstacles and most motivating factors that faculty in a non-research-focused College of Education in a Southern public university perceived as important in engaging in grant research writing. Second, and based on this needs assessment, the paper will make some recommendations and share resources and support that the College of Education can offer to its faculty for them to engage in this scholarly activity. To achieve this purpose, the paper will include a brief review of the literature, share quantitative and qualitative data results, and offer recommendations for further research in this area.

Literature Review

Need for Grant Research

According to Marsh and Hattie (2002), faculty members play a crucial role in the functioning of colleges and institutions of higher education. Other researchers (e.g., Bai et al., 2012) found out that the research culture in a given institution is enhanced by faculty scholarly projects. These researchers propose that the process of applying for and securing external funding not only affects institutions of higher education, but it also affects faculty development. According to Walden and Bryan (2010), producing scholarly work could be viewed as engaging in research, writing articles for publication, and sharing research findings with students and colleagues. However, in today's climate where budget cuts are affecting funding for faculty and students' professional development, seeking external funding becomes more and more an integral part of our scholarly activity (Hemmings & Kay, 2010). Due to budget cuts and fiscal challenges, external funding is now a major source of support for higher education institutions (Prince et al., 2007; Smith, 2016). Research in this area (e.g., Gitlin & Lyons, 2004) has documented the fact that many institutions of higher education are encouraging faculty to engage in grant writing because external funding not only enhances faculty research activities and career, but also brings prestige to these institutions. For universities to increase external funding for research along with increasing research productivity, it is essential that faculty members be motivated to engage in grant research and seek funding to support it (Chval & Nossaman, 2014). The pursuit of external funding could impact the process of faculty becoming better teachers, researchers, scholars, and practitioners who contribute new knowledge to their disciplines and bring greater visibility and prestige to the institution.

Major Obstacles to Grant Research

O'Connor et al. (2011) reported that most untenured faculty who are teaching at the College of Education could not balance teaching and conducting research because of an overload situation. These researchers explain the many barriers that impede the balance. These include continually preparing new classes every semester, heavy teaching loads, having a large class size, and having other administrative responsibilities. O'Connor et al. (2011) stated that "universities need to equip faculty members with support strategies for successful and thoughtful upward movement as opposed to being caught in an unbalanced drift" (p. 7).

One significant drawback or obstacle to grant writing, according to Walden and Bryan (2010), includes inadequate support available to submit proposals on time. They

also emphasized that "writing research grant proposals is a major means of seeking funding for research at institutions of higher education" (p. 86). However, it should be noted here that the levels of support to submit proposals on time may vary widely by institution and by type of institution. For example, research-intensive institutions, with adequate funding to support grant research, may not face such obstacles.

Another area of need that was identified by Walden and Bryan (2010) relates to a lack of grant-writing skills, which again may vary from one institution to another. Research-oriented institutions will certainly have more resources and professional development opportunities to address this area while non-research colleges may not. Walden and Bryan (2010) explained that:

While all faculty members have at least some academic writing experience, experience with grant writing may be limited to non-existent for some faculty. Academic and grant writing represent two distinctive genres of writing, each necessitating differing approaches (p. 86).

In addition to exploring obstacles that face faculty in this area, researchers in the field of grant research writing have also addressed what motivates them to engage in grant research activities.

Motivating Factors for Grant Writing

Smith (2016) found that full-time tenure-track and tenured faculty perceived autonomy and self-actualization as important intrinsic motivators. Data findings from her research showed that autonomy in the allocation of time, reducing teaching loads, choosing research topics, and choosing research objectives are all perceived as significant intrinsic motivation to faculty pursuing external funding. Extrinsic motivators to pursuing external grants were financial rewards including summer salary, travel, equipment, and materials and supplies. Indirect costs and hiring student workers are perceived as important to faculty motivators to pursuing external funding. Again, these findings may or may not apply to research-oriented institutions where faculty may have more institutional support to engage in grant research and, therefore, may hold different perceptions.

Walden and Bryan (2010) investigated the College of Education faculty's perceptions of motivators and barriers to grant writing at a public research one university. Tenured and non-tenured faculty indicated several significant motivators. These were related to the opportunity to research new information, having graduate assistants to assist for pre- and post-award grant management, securing financial support for

conferences and professional development, and having more flexible time.

Thus, to provide adequate support to faculty, institutions of higher education need to have a clear understanding of the factors that contribute to faculty motivation to seek external funding. Understanding the motivating factors, as well as the obstacles that prevent faculty from engaging in grant writing will provide valuable information for colleges and universities to design effective professional development, provide resources, and create policies that support faculty members to engage in this creative scholarly activity. Research findings in this area vary from one institution to another, depending on so many variables, which include size and type of institutions, available resources, and policies. However, there has been a consistent finding that calls for the need for more support for faculty in their endeavors to pursue external funding (Boyer & Cockriel, 1997; Grant & Shin, 2011; Smith, 2016; Walden & Bryan, 2010). Since each institution is unique and given the documented need for faculty support, the purpose of this case study was to answer the following three questions:

1. What motivates the College of Education (COE) faculty to pursue external funding?
2. What factors may pose an obstacle for COE faculty to engage in grant writing and related research?
3. What recommendations, resources, and support does COE faculty perceive as needed for them to engage in this scholarly activity?

To answer these research questions, we examined existing anonymous data that has recently been collected by the College of Education within each department. Quantitative and qualitative data analyses was used to explore the patterns that emerge from these data. Based on results from this study, the researchers provide a set of research-based recommendations, strategies, and resources to support grant research and inform related professional development activities.

Method

Setting and Contextual Background

The setting and institution where this research was conducted is located in the state of Texas. The target state university, which has been classified as a “Doctoral Research University” by the Carnegie Commission on Higher Education, began as a purpose-built Normal School and for more than 130 years, the university has been

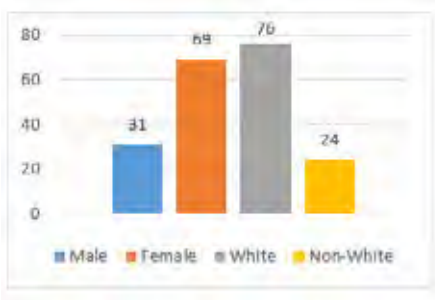
preparing teachers to serve the needs of a diverse student population. It is the oldest school of education west of Mississippi. The College of Education (COE) currently serves more than 1,400 undergraduate and 900 graduate students each year. The COE boasts an 83.2% retention rate for teachers, which is higher than the state average. Additionally, the pass rate for teacher candidates on their certification exam, the Texas Examinations of Educator Standards (TExES), is consistently above 90%. The College of Education produces more doctoral degrees than any other colleges in the university, averaging 44 graduates from five degree programs. The COE provides a Bachelor of Science in Education for undergraduates, which encompasses over 25 certification areas for future educators. It has 15 master's degree programs, and five doctoral degree programs. COE currently serves over 75 school districts across the state of Texas, in a mutually beneficial partnership group comprised of an educator preparation program and independent school district partners. Approximately 45% of students are the first in their families to attend college and 60% are qualified as "at-risk." The student population is 24.7% Hispanic, and 18.1% Black or African American. The mission of this college is teaching-focused, and the university is not an R1 institution.

Participants

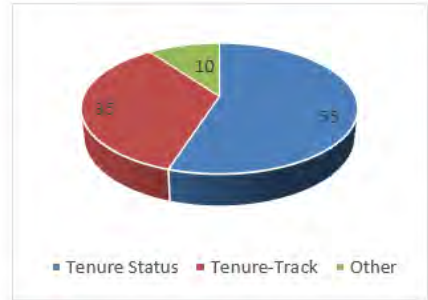
The survey was sent to 80 faculty members and 49 responded, with a rate of 61.2%. The participating COE faculty members' demographics are summarized in Figures 1 and 2. The COE includes five departments: Curriculum & Instruction; Language, Literacy, and Special Populations; Library Science & Technology; Counselor Education; and Educational Leadership. Faculty members represent 12 different program areas. Ninety percent (90%) or 44 of them are full-time faculty members; five of them are clinical faculty. Seventy percent (70%) hold a Ph.D and 30% an Ed.D degree. Tenured and tenure-track COE faculty members are three courses per semester instead of four, as these faculty members receive one course release for conducting research. Faculty members are encouraged to plan for course buy out through grant funding if they are awarded. There is no release time for grant writing or for chairing dissertations.

Figure 1

Faculty Demographics

**Figure 2**

Faculty Status



Research Design

A case study of non-experimental existing data research design was selected to examine the relationship between different phenomena without any direct manipulation of conditions that are experienced or identifying cause and effects (McMillan & Schumacher, 2010; Privitera & Ahlgrim-Delzell, 2019).

Yin (2009) describes case study research as: ". . . an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 638). In other words, the subject of the research is comprehensively studied as an example of a real-life phenomenon, within the context in which it is happening.

The researchers obtained permission to use existing data collected by the College of Education administration through a survey instrument. There was no random assignment of participants and no control groups. The online survey was sent to all COE faculty members. Participants' motivation and their perception of potential obstacles in engaging in grant research were assessed based on their responses to the survey. The survey questions covered the following areas:

1. Number of external grants submitted and awarded;
2. Amount of each grant in dollars by year;
3. Grant awarding agency's name; and
4. The discipline, purpose, and title of the grant.

Participants were also asked to describe and rank-order 25 items as motivating factors in pursuing external funding. The 25 items included things such as having more

flexibility in the allocation of time to receiving financial support for student workers or other staff. The survey also included an open-ended question where participants can describe factors that may pose an obstacle for them to engage in grant writing and grant-related research as well as any other comments. Quantitative and qualitative data analyses were used to explore the patterns that emerged from these data to answer the three questions that this case study focuses on. Qualitative data were analyzed using a domain and thematic analysis, based on the research questions, by generating categories and then themes from the answers given (Ely, et al., 1991; Miles & Huberman, 1994). Descriptive statistics were used to describe, analyze, and summarize quantitative data (Privitera & Ahlgrim-Delzell, 2019). Based on results from this study, the researchers provided a set of research-based recommendations, strategies, and resources to support grant research and inform related professional development activities.

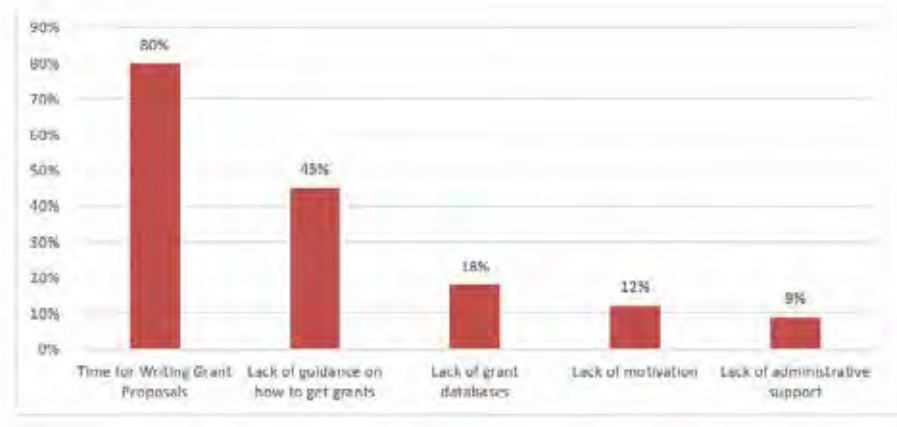
Results

1. COE Faculty Perceived Obstacles

Five obstacles were reported by COE faculty to be barriers to engaging in conducting grant research and securing external funding. These include time to write grant proposals, lack of guidance on how to receive grants, need for grant databases that would match faculty research interest and grant opportunities in their area, lack of intrinsic motivation, and need for more administrative support. Among these obstacles, time to write grant proposals was found to be the most challenging obstacle (80%). The majority of faculty found it difficult to strike a balance between conducting grant research and other regular responsibilities and finding time to write grant proposals. Many faculty members also agreed that lack of technical guidance (45%) was another obstacle they faced in engaging in grant research. Moreover, need for grant databases that would match faculty research interest and grant opportunities in their area was described as an obstacle by 18% among faculty; lack of intrinsic motivation was reported by 12% of COE faculty members, whereas, need for more administrative support was reported by 9% among them. These were identified as factors that caused faculty to avoid conducting grant research or seeking grant research opportunities. Figure 3 summarizes these results.

Figure 3

Most Challenging Obstacles to Grant Writing



Qualitative data corroborate the above results. The following are some representative quotes from faculty comments regarding time as a major obstacle. One faculty member stated:

Buyout time is critical to grant implementation and needs to be honored. Time is a major factor for me, crushing teaching loads, and service on committees leaves little time for grant work. My committee/college workload is so heavy between that and teaching there is no time.

The issue of time as it relates to certain disciplines where finding adjuncts or faculty who can cover teaching loads for regular faculty becomes another challenge for some faculty. One faculty member stated: "It is difficult to find the time it takes to write a grant. Then if you are funded, there is an issue of who is covering the courses that you might not be available to teach."

Another theme that emerged from the qualitative data analysis relates to the creation of a grant research database that would match faculty research interest and grant opportunities in their area. A representative quote for this perceived obstacle was shared with one of the faculty members who explained it as follows: "I need help from the office of grant research to identify grant proposals that match my skills well in advance of their due date." Other faculty members complained from other perceived obstacles such as "limited knowledge of the process," "lack of grant writing experience," and "need for help with grant writing." As one faculty member put it "I

think just having guidance on how to actually write the grant proposal is helpful. One big challenge for me is not knowing where to start from, not having the background to get grants and lack of knowledge in locating, obtaining, and managing grants."

It should be noted here that qualitative data also helped clarify some obstacles towards grant research writing, related to the obstacle of administrative support, as one faculty member explained:

There is no reward for grant writing either and it's time consuming, so why do it? We aren't rewarded for getting external grants in this college, since our faculty evaluation system and our tenure and promotion system do not include grant writing as a criterion in these assessments.

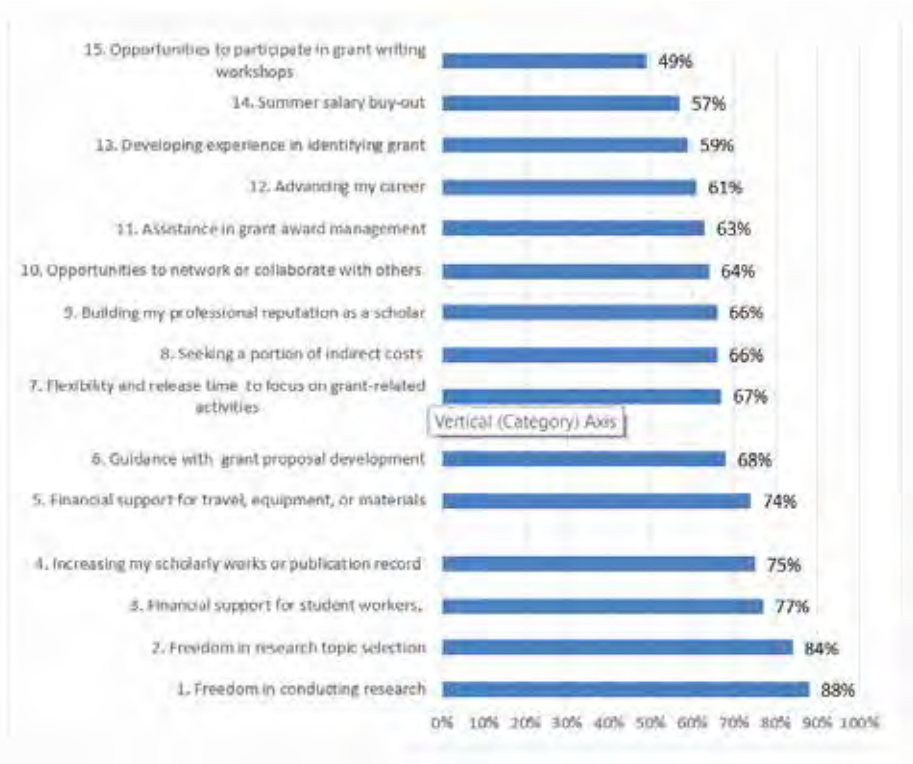
Finally, faculty members who mainly teach undergraduate courses or work mainly with online programs explained in this representative quote that one of the obstacles is the "...need for graduate student research assistants. However, when you work primarily in the undergraduate program or online, you are not supported with graduate research assistants."

2. COE Faculty Perceived Motivating Factors

Figure 4 shows two motivating factors for engaging in external grant research that were considered most important by COE faculty members. These were freedom in conducting grant research (88%) followed by freedom in grant research topic research (84%). The majority of faculty also perceived offering financial support to student workers or graduate assistants (77%), increasing their publication record (75%), and to receiving financial support for traveling and other materials (74%) as a good motivating factor. Faculty members' motivation factors can be classified into two superordinate categories: extrinsic and intrinsic motivators. Extrinsic motivators include factors such as numbers 14, 3, 4, and 8. Intrinsic motivators include numbers 15, 13, 12, 11, 10, 9, 7, 6, 4, 2, and 1. Both types of motivators received a high rating ranging from 49% to 88%, as shown in Figure 4.

Figure 4

Most Challenging Obstacles to Grant Writing



In spite of the perceived obstacles and challenges that face COE faculty, some members do engage in seeking external funding. Figures 5 and 6 summarize COE faculty responses when they were asked to list the number of grants submitted and awarded as well as the dollar amount awarded. During the 2015 academic year, 18 grant proposals were submitted, and two were funded. That was an 11% rate of success. However, in 2016, the rate went to 100% when all seven proposals submitted were funded. In 2017 and 2018, the rate was 31% and 75%, respectively. In short, and as shown in Figures 5 and 6, COE faculty submitted a total of 49 proposals, and 20 of them were funded during the last four years. That is an average of 16 proposals per year and a success rate of 40% on average for the College of Education. Figure 6 shows that the total dollar amount submitted for external funding during the last four years was \$51,576,252, and the awarded amount was \$18,538,073 dollars.

Figure 5

Proposals Submitted and Grants Awarded last Four Years

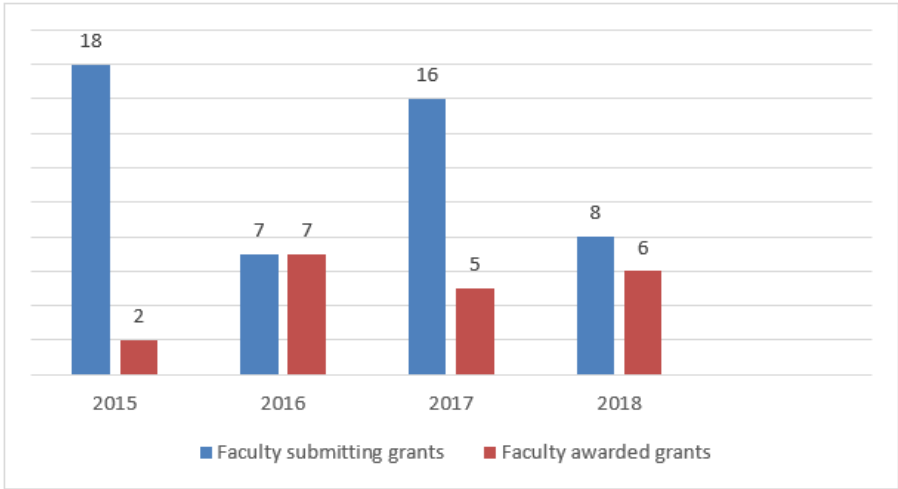
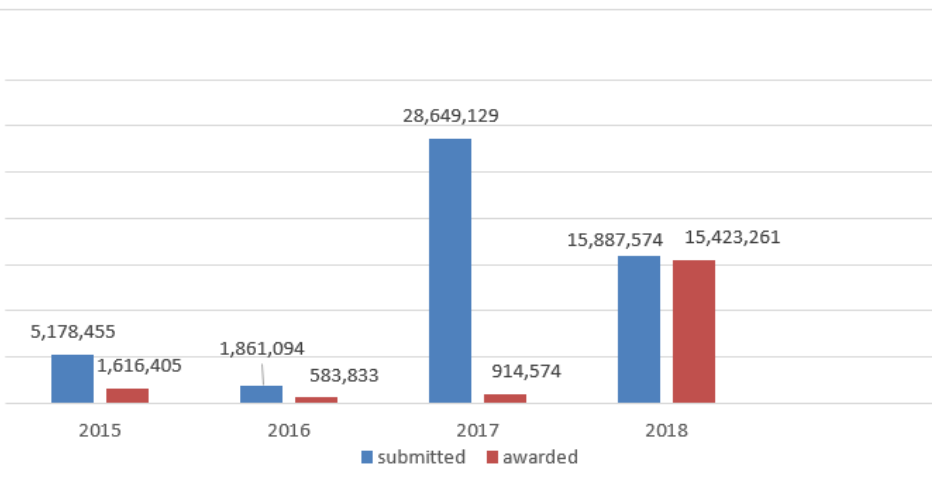


Figure 6

The Amount of Proposals Submitted and Grants Awarded Last Four Years



Discussion

The institution at which this case study was conducted regards teaching as a high priority while considering research (not necessarily grant-related research) and service as important components in faculty evaluation. Teaching remains an essential activity and as part of COE faculty members' identity. Research is seen as important, and all tenured and tenure-track COE faculty members are required to engage in this scholarly activity, which may not be related to grant-research. The COE sees research as part of faculty duties, and it is generally awarded and supported. It should be noted here that while engaging in non-grant-related research seems to be less risky, grant-seeking activities, on the other hand, are fraught with risk because success is not guaranteed. However, grant-writing has recently begun to receive more attention as a way to facilitate the work of the faculty, college, and university.

The data results regarding the number of grants submitted and awarded by COE faculty may be interpreted in various ways. One possible interpretation may be that a minority of faculty members have continued to develop their grant-writing skills over the years, which resulted in more success. These faculty members who do spend the time and research to apply for and successfully achieve grant awards tend to go for the largest monetary awards. In fact, in 2017, the COE was awarded a major Support Effective Educator Development (SEED) program grant with \$8.9 million from the U.S. Department of Education to further support the college's existing 4+1 TEACH program. The COE will be able to apply for a renewal extension in the following two years for over \$4.6 million from federal funding sources, bringing the total projected federal funding for the program to more than \$13.5 million. Another possible interpretation is that the overall educational climate in the state in terms of policy changes and available opportunities in certain discipline areas may have contributed to the surge in the number of grants funded. Change to the COE climate in terms of creating an infrastructure and task force to support faculty in this area at the college level may also contribute to changes in results. Other ways of interpreting these data are that COE faculty may have simply started to focus on large scale grants instead of small ones. While this is a good strategy, writing smaller grants might spread the wealth across faculty, encourage collaboration (Daniel et al., 2006), and increase financial stability within the college (Santos, 2007).

This study aimed to answer three essential questions regarding faculty pursuit of grant funding for research. COE faculty members acknowledge the benefits of external funding and understand the importance of pursuing grants. Their response to the question "What motivates College of Education faculty to pursue external funding?" corroborated what previous research in other contexts has discovered. The

greatest motivators for these participants were

1. Freedom to conduct research, and
2. Freedom in research topic selection.

These factors were found to be intrinsic motivators by other researchers such as Smith (2016) and Walden and Bryan (2010). Pursuing external funding may provide autonomy in the allocation of time (Smith, 2016). The factor of lack of time to write grant proposals was perceived as a major obstacle by COE faculty. Other obstacles reported in this study seem to interact with each other. For example, to address the issue of time, COE faculty members may be provided with more administrative support, effective professional development activities, strategies for how to balance time and duties, incentives, and more administrative support, especially for faculty members who may feel isolated or unsupported. This can only happen when institutions of higher education are using an inclusive and culturally responsive approach in their leadership style (Sehlaoui, 2019).

Other areas where faculty believed grant funding was helpful was in providing money to hire student workers, who can then also be involved in the research process, which has been acknowledged in the literature (Walden & Bryan, 2010). In the undergraduate realm in STEM, for instance, it is not unusual, and greatly encouraged, for undergraduates to be co-authors on published research (Linn et al., 2015; Lopatto, 2010). This is an important aspect of the university experience that faculty would like to share with students. It should be noted here that both the COE and the university seem to provide opportunities for faculty and undergraduate students to engage in grant research. External funding may provide release time from course preparation and teaching as well as other duties involved with course delivery. This frees faculty to conduct research in a way that will both promote career and increase writing opportunities.

Regarding Question 2 (What factors may pose an obstacle for College of Education faculty to engage in grant writing and related research?), COE faculty identified a cluster of issues. The results tend to show that one of the main issues for these respondents to pursue extramural funding is lack of time for grant proposal writing. The development of proposals, as well as the writing and preparation, are so time-consuming that they prevent faculty from engaging in grant research activities (Dooley, 1994; Smith, 2016), especially now that chances of having a proposal funded have become more competitive. The results here show that faculty continue to struggle with the time it takes to research available grants, where to look to find them, how to gain support in the writing tasks associated with them, and the like (Henson, 2003).

Finding the right grant for a particular project was also identified as an obstacle to the pursuit of grants, but only a small percent (18%) of faculty reported this obstacle. This finding seems to be supported in the literature as well (Boyer & Cockriel, 1997). It should be noted here that the target university has both an Office of Research and Sponsored Programs (ORSP) and an Office of Research Administration (ORA). The ORSP has 12 staff members including the VPR. The ORA office consists of three staff members. Both offices provide workshops and technical services to all faculty members in the institution, including COE faculty.

In response to Question 3, (What recommendations, resources, and support does College of Education faculty perceive as needed for them to engage in this scholarly activity?), faculty perceived a more intentional support in the form of guidance in grant seeking, as well as grant writing, as most helpful. For many reasons, the grant-seeking process is difficult without guidance (Porter, 2006). Even when presented with possible grant funding, faculty may not know how to align their research interests with the constraints of the grant. Based on qualitative and quantitative results reported in this study to answer question 3, both tenured and tenure-track faculty need help to raise their level of preparation readiness in engaging in grant research (Shuman, 2019).

Grant writing is not done in the same style as a scholarly paper (Porter, 2005, 2017). Grants must be written in a persuasive way and without industry jargon so that readers who are not familiar with a specific discipline can still understand the aim of the proposal. Some faculty members in this study expressed a lack of administrative support, which is noted in the literature as well (Smith, 2016; Wimsatt et al., 2009). These faculty members believe there is a need for support and help in writing and winning grants for their research interests (Banta et al., 2004) and they seem willing to be part of the process.

Conclusion

This study, like any other research, has its own limitations. This study was conducted at one institution and was limited to only one college within that university. As noted earlier, findings from this case study may differ within the academic units in the same college as well as between and among colleges in the same institution. Findings from this study may also differ within programs in the same department as well, based on the variables of faculty rank and gender. Future research may explore these variations. The convenience sample used may not be indicative of all colleges of education. Since there had not been intentional activity to explore faculty grant-research activities

and increase grant funding before this research was conducted, it was of interest to understand the thoughts and perceptions of the COE faculty members. This case study provided a baseline for future grant-seeking support activities.

The study could be conducted in other colleges in the same university or with other colleges of education in other universities for comparison purposes. A follow-up in-depth interview could have been used too. Different aspects of the grant-award process would benefit from closer scrutiny in order to better understand at what critical points faculty need support, and what support they feel will best benefit them. Besides, successful grant awards can be studied to get a better understanding of best practices, and then disseminating this information to newer researchers in the form of workshops, one-on-one coaching sessions, and the like. Continuous evaluation of this process can then allow faculty a better map for the achievement of successful grants with less investment of time and effort to create a successful grant proposal.

Based on data results from this study, the following recommendations may contribute to addressing some of the perceived obstacles reported by COE faculty. These can be summarized as follows. Institutions of higher education and colleges of education should:

1. Develop policies such as incorporating and valuing grant research as part of merit and tenure evaluation criteria for faculty in non-research-oriented public institutions. For example, rubrics and assessment systems used to evaluate the area of scholarly activity could assign certain points or percentages to grant proposals submitted and different points to grants awarded as well as percentage points for those being managed or directed. Academic units could also incorporate goals and objectives in their overall strategic plan that cover cost for grant research professional development opportunities and seek support from their institutions to attain them.
2. Streamline processes and procedures to facilitate faculty engagement in grant research as well as their management of grant administration. Based on feedback received from the needs assessment data in this case study, the COE offered workshops that addressed this aspect of grant research. The Office of Grant Research and Sponsored Programs as well as the Office of Grant Administration in collaboration with the COE Grant Research Director, organized training sessions to interested faculty in the college to address this aspect of grant research.
3. Strategically plan to continue to support faculty efforts in this area and include it as part of the institution's strategic plan.
4. Continue to conduct needs assessment that will inform the planning and design

of professional development activities and support for faculty grant research and creative scholarly activities in this area. While this seems to be part of good business practice, some non-research institutions may not conduct these surveys regularly.

5. Create a college-level grant liaison team from faculty members who represent each department in the college to be used as an instrumental strategy in achieving the College of Education's goals in this area. The COE created a COE Grant Research Liaison Team (GRLT) representing each of its academic units. The team meets monthly to brainstorm ideas for professional development opportunities, provide collegial support, and create a positive grant research culture to help faculty engage in this creative scholarly activity.
6. Based on needs assessment data obtained from the study, a website was constructed to provide COE faculty with databases that match faculty research interest with grant opportunities, COE-based resources that target grant research in the sciences of education, and web-based professional development opportunities that target the identified areas of need.
7. Use an inclusive and culturally responsive approach by making sure that minority faculty members are engaged and supported in this area, including representation in the GRLT committee.
8. Use strategies to raise the preparation readiness level of faculty to engage in grant research. These strategies will consist of meetings of members of the GRLT members with different program coordinators and individual faculty members to plan ahead of time for upcoming grant competitions and assist faculty with raising their level of preparedness.
9. Offer effective professional development opportunities that address topics for basic pre-award-related aspects of proposal development to advanced workshops that would support faculty throughout the pre- and post-award grant management. Based on data results obtained from the case study, the COE GRLT organized various workshops throughout the academic year that address the areas of needs identified. For example, and for the first time, the COE was able to create a Grant Research Activity and Creativity Day (GRACE Day), where COE faculty members were invited to share their grant projects and learn from each other. GRACE Day was offered in multiple formats such as oral presentations, panel discussions, video podcasts, and dialogue or poster sessions.

Research culture in a college or a university is enhanced by faculty scholarly projects. These include the pursuit and achievement of grant awards. Faculty gain financial, as well as scholarly success, which increases career achievement and battles the effect

of budget cuts. The successful pursuit of external funding could impact the process of faculty becoming better teachers, researchers, and scholars. This process needs administrative and technical support to be successful. This is especially important for non-research institutions that aspire to strengthen and support the area of grant research. It should be an intentional act to achieve the goals that will not only increase faculty scholarship, but will also help support the reputation of the college as an academic institution and improve its infrastructure to serve the needs of students and society. This case study was an attempt to describe the most challenging obstacles and most motivating factors that the College of Education faculty perceived as important in engaging in grant research writing.

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