Building a Community of Scholars in Educational Research: A Case Study for Success

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No funding was requested or received in conjunction with this project. The authors report no known or suspected conflicts of interest related, but not limited, to consulting fees, paid expert testimony, employment, grants, honoraria, patents, royalties, stocks, or other financial or material gain involve with or pertaining to the subject matter of this work.

Keywords: faculty, development, college of pharmacy, pharmacy, curricula, community of practice, community of scholars

Abstract

***Objective**: To present the model of the Education Research/Scholarship of Teaching Community of Scholarship (EdCOS) as one Community of Scholars (COS) within a department of pharmacy.*

***Case Study**: A case study describing the Education Research/Scholarship of Teaching Community of Scholars (EdCOS). Faculty members were self-selected into one or more of eight COS. The EdCOS was comprised of 14 members. The EdCOS developed a vision statement to "foster and support a learning culture that enables faculty to capture and evaluate teaching and learning experiences." The process by which the EdCOS set out to initiate this COS will be discussed. Since its inception all members of the EdCOS have become IRB Certified. Through a combined project, members had the opportunity to develop, learn, and acquire experience in areas of conducting research from the conception of a project through final submission of the manuscript. Departmental publications and grant funding increased over the years after the implementation of the COS.*

***Conclusion**: Although cause and effect cannot be explicitly determined, the EdCOS has had a positive impact on its members building confidence, experience, and ideas for future projects.*

Introduction

Clinically-oriented college or school of pharmacy faculty are charged with a number of tasks: developing a rotational site for introductory pharmacy practice experiences (IPPE) and advanced pharmacy practice experiences (*APPE*), formal didactic instruction, institutional service, and scholarship. In order to develop the skills necessary for success, faculty development is essential. As a component of clinical services, more colleges and schools of pharmacy are expecting clinical faculty to produce scholarship as it relates to education or patient care whether case reports or series, literature reviews, or aggregate data reporting. Most clinical faculty are not equipped through their educational program in pharmacy school with an appropriate skill set to create and publish this type of scholarly output. This dearth in the development of effective programs was recently reviewed by Guglielmo and colleagues.[1]

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Faculty development can be accomplished in a multitude of ways. One recognized method for faculty development is through a community of learning. Selznik, referring to communities of learners,[2] specifically states communities provide settings within which people grow and flourish and identified dimensions of community: autonomy, history, identity, integration, mutuality, participation, and plurality.[2] Based on these dimensions, strong communities share a sense of history, culture, and identity while recognizing individual differences. Robust, successful communities coalesce through participation and mutual dependency/respect. Misanchuk et al[3] built upon Selznik's work by applying the characteristics of community to a group of learners. According to Misanchuk et al, a successful community will interact on three levels: communication, collaboration, and cooperation.[3] Group members should feel as if they are in a safe place where they can speak up and contribute to the overall goals of the community. Through collaboration, the group works toward a common goal. Each member may cooperate by completing individual tasks and then collaborate by consulting with the others in the group. The successful community demonstrates ownership of the project and the realization of a shared identity through the overall project. Additionally, Paloff and Pratt[4] recommended seven steps to build a virtual community. These include a clearly defined purpose, gathering place creation, leadership

from within, promotion, norm and conduct code creation, tolerance for a wide range of member roles, and internal dispute resolution by members.[4] These attributes have applications for other settings as well.

Chickering and Gamson, oft-cited educational experts, provide a basis for good practice that is grounded in interactions, cooperation, active learning, feedback, time-on-task, high expectations, and respect for diversity in talent and learning styles.[5] The EdCOS utilized this model in the development of the group. In addition, a review of this model demonstrated that one of its strengths was its applicability to asynchronous communication.

Building Communities of Scholars at the University of Oklahoma

It was a logical step to bring the models described into a more comprehensive faculty development program. Following the community of learners development theory described above, the Department of Pharmacy Practice: Clinical and Administrative Sciences—Tulsa (PCAS-T) introduced the concept of a community of scholars (COS) model to the faculty in 2008 during a department retreat. To help coalesce the group, prior to the retreat the faculty were asked to identify areas of interest, goals for the academic year, strengths/weaknesses, and resources to help achieve their goals.

The administration determined that calling the groups communities of scholars would be more appropriate than community of learners; however, the concept is the same. During the retreat, the administration explained that institutional expectations for scholarly output were changing. As a result, faculty who had previously had little or no requirement for scholarship would be expected to produce scholarly works for promotion. In order to facilitate the change, the faculty, through the leadership of their chair, created multiple communities based upon the research interests of the departmental faculty. At the time of introduction, PCAS-T consisted of 15 faculty members. In the pharmacy administration area, one was tenured faculty at the rank of Professor and two (2) tenure-track faculty, both at the associate level. The department also housed 12 clinical faculty, two (2) associate professors and nine (9) assistant professors. It was determined that six communities would be formed. The first COSs were chaired by tenured or tenure-track faculty, with the exception of the Education Research/Scholarship of Teaching Community of Scholars (EdCOS), chaired by a non-tenure-track clinical assistant professor who holds a Ph.D. in Education. The College of Pharmacy administration took a proactive approach to the process. Faculty time for meetings and associated committee work were included on the annual faculty reports to demonstrate administrative commitment to the process and goal of the project.

The department's primary objective for considering the COS model was to enhance scholarly productivity and strengthen camaraderie among constituent members. The department chair initially assigned the six communities and identified the chair based upon a survey of the facultys' research agendas or clinical practices. Faculty were given the opportunity to move within the COS structure to determine the best fit for the individual considering interests and schedules. All faculty members were expected to participate in at least one COS.

At the department level, each community was afforded latitude and flexibility in its operationalization and meeting frequency. It was anticipated, however, that the communities would remain active and able to demonstrate utility and synergy either by one or more projects developed, evidence of scholarship, and/or through enhancement of an existing project by one of the members.

Consulting the Literature on COS

As part of the EdCOS community activities, the community members determined a need to record the process of building the Departmental COS Model. The EdCOS conducted a literature review for peer-reviewed information on communities of scholars as a function of faculty development. While initiatives for faculty retention, mentoring, and development have been reported. The need for preparing and recruiting, developing and retaining, and renewal were recognized by Draugalis.[6] MacKinnon reported motivators for formal or informal faculty development were improvement in teaching, research, and work quality.[7] Taylor and Berry found that the development of a program that addressed the individual needs of faculty was positively evaluated and could foster long-term retention.[8] Common barriers to scholarship among pharmacy, nursing, medicine and dentistry were consistent for the following areas[9]:

(1) reduced scholarship opportunities due to clinical service and teaching responsibilities,
(2) requirements for clinical positions are inconsistent with promotion and tenure guidelines,
(3) other opportunities for scholarship for tenure and promotion are not widely known,
(4) limited role models and mentorship for clinical service and scholarship activities, and
(5) scholarship in not stressed within the institutional culture.

Although faculty development has been well-documented in literature that spans disciplines, the literature revolving

around communities of scholars is limited. Developing a community of scholars within the faculty, historically, has not been a priority at institutions as demonstrated by a quote from Cuban, "I have found little sense of belonging to a community of scholars and practitioners"[10]. In fact, a fundamental issue exists within any profession, the issue of limited resources. Faculty face a daily dilemma of performing all of the varied tasks expected of them. For a new faculty member, the duties may seem overwhelming. Although Cuban's[10] thoughts were penned almost 20 years ago, the feeling persists today among professional faculty members who struggle with the competing expectations upon their time.

Within the pharmacy education literature, the ACPE Standards 2007 emphasize communication and collaboration as skills necessary for a cooperative team approach. Pharmacy faculty are encouraged to build communities of learners with the ultimate goal of building the collaborative teams of professionals.[11] The literature offers suggestions for building communities of learners; and yet, creating collaborative teams of faculty for scholarly endeavors is limited in academic literature. An exhaustive literature search revealed only three articles related to the subject; all describing either national or global communities. Watson indicated that a community of scholars is essential to the process of research and learning. In his paper, he described an international model of community, focusing primarily upon building an easily accessible electronic database of information.[12] Describing a national model, Cash and Tate detailed the collaborative nature of a community of nurses across Canada.[13] The third article described an undergraduate course for pre-service teachers studying educational technology.[14] Literature concerning the use of a COS model as part of a more comprehensive faculty development program within an institution or department was not found. This paper, building upon the theoretical framework of communities of learners, will address how one institution bridged the gap, not only in the literature, but also in practice, and developed a model for a faculty development program utilizing a community of scholars.

The Education Research/Scholarship of Teaching COS

The Education Research/Scholarship of Teaching COS (EdCOS) is offered as a case study in this paper. The EdCOS identified objectives which included:

(1) increase the number of publications related to teaching within the department;
(2) encourage Institutional Review Board (IRB) training for all faculty in the department;
(3) provide development opportunities in research design, data collection and analysis, and facilitate the use of statistical software packages;
(4) identify current projects that are scholarship-worthy and seek collaboration partners;
(5) work collaboratively within the COS, department, college, and university; and
(6) explore opportunities to work collaboratively outside the university.

The EdCOS was created to enhance the communication, collaboration, and cooperation of faculty who were interested in identifying and producing scholarship based upon classroom activities. The EdCOS was chaired by the college's Instructional Design Specialist (IDS), a member of the faculty with a doctoral degree focusing in education, particularly online learning. The EdCOS members included two faculty at the associate level with five or more years at the university, and ten (10) assistant faculty with between one and ten years at the university. Additionally a research/graduate assistant-Ph.D. candidate and a biostatistician were members of the EdCOS.

The chair of the committee followed strategies similar to those recommended by Paloff and Pratt to build the community.[3,15] By using the models described previously,[2,4,12,14] the EdCOS, through the leadership of its chair, worked to facilitate an environment that fostered learning in the arena of scholarship creation and production. Each meeting of the EdCOS was a collaborative environment providing every member a safe area to ask questions and provide input into the process. As members of the group had a desire to learn about all aspects of the scholarship process, it was decided that the group would work as a team to design a research project with the goal of publishing the work. It was hopeful that this approach would help members of the EdCOS build their confidence in scholarship to eventually conceptualize their own research, knowing they can come back to the EdCOS with any future questions or problems. The EdCOS developed a vision statement to "foster and support a learning culture that enables faculty to capture and evaluate teaching and learning experiences." As a community, the group concentrated upon identifying individual or collaborative projects underway. The EdCOS provided support and guidance to allow the faculty an opportunity to produce scholarly output from current projects while also selecting a research agenda for the entire EdCOS.

A Collaborative Educational Research Project

The agreed upon research agenda of the EdCOS was used as a teaching tool to show the importance of each step in the

research process. The EdCOS met semi-monthly to plan the project. With each meeting the group went through the research process step-by-step. Members were encouraged to hone skills, such as developing a research question, writing a hypothesis, conducting a literature search, gathering data, and/or analyzing results, by participating in areas in which they were less familiar. Every phase of the research project was available for development. More experienced researchers were paired with less experienced researchers so that all members had the opportunity to learn. Members were also encouraged to take leading roles on different aspects of the project (e.g. IRB application, poster presentations, manuscript). To foster collaboration and build ownership in the project, the EdCOS chair was not the lead author on any specific piece of the project. Small subgroups worked well because it allowed for flexibility of members' schedules. At each meeting, progress was reported back to the entire group.

The selection of a topic was based on the EdCOS discussion of changes in pharmacy practice, the role of the pharmacist and the delivery of pharmaceutical care. Cultural competency within the college curriculum was identified based on transitions in pharmacy practice, accreditation requirements for colleges of pharmacy, and United States demographics. Through consultation with the department chair, IDS, and EdCOS members, a research methodology was selected. The project was divided into a series of phases. Under the guidance of the EdCOS chair, the group first developed operational definitions. Next the group identified the research questions for the project, identifying two avenues of inquiry. Based upon the line of inquiry, four research questions were written. The EdCOS then developed a research methodology to answer each question, sought IRB approval, and completed data collection on the current status of instruction at the college. As a group, the EdCOS encouraged everyone to receive IRB certification. One hundred percent (100%) of the EdCOS is now certified. A second line of inquiry was designed as a longitudinal project with data collection over a four-year period (2010/2011 – 2014/2015 academic years).

Following the project design and data collection, the EdCOS divided into three writing teams. One team elected to write this paper. The other teams will write about the actual research projects. To date, one poster presentation/abstract was published by the American Association of Colleges of Pharmacy (AACP) in the American Journal of Pharmacy Education (AJPE).[16] Two manuscripts have been completed and are in the process of being submitted for publication consideration.

Challenges

Challenges to creation of a COS program include increased faculty time commitment for meeting attendance, which may be problematic in context of other didactic, service, and research obligations. Through departmental support of the COS model, faculty were given the opportunity to participate in one or more COS groups; however, faculty may have been forced to choose between various COS groups and/or been unable to commit to an additional COS meeting, even though the group's focus may fall within their professional or research interests. With the freedom to participate in the COS that best fits an individual's needs at the time, the group membership was fluid and dynamic. Faculty could join or leave a COS at the conclusion of each project.

Finally, COS programs require support from college departmental leadership, including provision of administrative/secretarial support. The PCAS-T department incorporated participation into the annual review process, provided meeting space, and secretarial support to each COS. Additionally, the chairs of each COS meet at least twice per semester to discuss individual group progress and offer suggestions and ideas for new research interests. Essentially, the chairs of each COS formed their own community during the process.

Factors for Success

It is the opinion of the authors that the EdCOS was successful in meeting its objectives because the group was allowed to be a community of learners and scholars and this freedom to create and develop the project represents the most innovative aspect of our work. Although a COS chair was designated by the department leadership, the group functioned with all members on a level playing field allowing the strengths of each member to be highlighted while working as a community to reduce the weaknesses of the team. Each member had a voice in the process and all ideas were shared and respected. By following the seven steps of Paloff and Pratt, a highly functioning group was formed.[4]

One of the strengths of the PCAS-T COS model was that participation was rewarded through the annual review process. Another particular strength of the EdCOS is that a set of clear objectives were written for the group to guide the formation of the community.

For other institutions considering implementation of this model, careful consideration should be given to the group formation and goals. Mandating participation without a reward structure and plan to allow enough time to participate can create resentment and opposition. Providing mutual benefit and reward, and allowing a level of autonomy

with internal locus of control can be successful. It is also important to note that "instant" success should not be an expectation of administration. The groups should form around similar goals and interest with the possibility of movement between groups. The EdCOS took two years to produce publishable scholarship as a group; however, individual projects were published earlier.

Assessment of EDCOS Objectives

The EdCOS identified six objectives during its first meetings. A formal study to quantify the objectives was not conducted; however, the group did make progress on the objectives during its first two years. Concerning the number of teaching related publications, the group identified multiple projects (Objective 4) that were scholarship worthy and reported three (3) published papers, 11 national poster presentations and/or presentations, and four (4) papers that are in progress or completed for the timeframe of April 2010 to the present(Objective 1). All members of the EdCOS received IRB certification from the institution within the first semester of the COS (Objective 2). The research project of the EdCOS was designed to provide development opportunities (Objective 3) to each member in the research process, although specific training in statistical software packages was not provided. The research project selected demonstrates success in working collaboratively with the COS and department (Objective 5). Additionally, non-departmental colleagues and a graduate student joined the EdCOS during its second year. For the final objective of exploring opportunities to work collaboratively outside the university, members of the EdCOS are working with other health care professionals at practice sites to generate additional scholarship that is practice-based. Three manuscripts from these collaborative relationships are currently in press.

Additional outcomes that may be related to the COS program include:

(1) increase in scholarship, particularly through the encouragement of collaborations within the COS system and with stakeholders from other departments, colleges, and institutions, (Table 3)
(2) increase in collegiality, as evidenced by the number of projects that are underway where multiple faculty members are working together to produce the scholarship,
(3) increase in the mentoring of junior faculty, graduate students, research assistants, and professional students, demonstrated by the number of publications and projects that have been completed and are in progress, and
(4) increase in overall awareness of innovations in teaching or practice and a willingness to share, as can be demonstrated through the peer observation program, the mentor/mentee relationships, and the number of students seeking mentorship by faculty members.

Future Directions

The EdCOS leadership changed during the Fall 2011 semester. The future plans of the group are to conclude the current research questions and complete the manuscripts based upon the research. Following this proven method of success, the group will move forward by identifying new research questions and designing new projects. In addition, the EdCOS will continue to support individual research related to the scholarship of teaching and learning.

Progress with COS at the University of Oklahoma

Recognizing a need to increase scholarship in the department, the department's administrative leaders introduced a format for building communities of scholars. Since its inception, the number of departmental COS groups has grown from six to ten, with an eleventh proposed for the current academic year (2010-2011), and include faculty in two departments as well as stakeholders from outside the COP. Although no formal study was conducted, and a cause/effect relationship cannot be established, the department, regardless if the faculty member elected to participate in a COS or not, has seen growth in the area of scholarship as evidenced by peer-reviewed publications and grants. In 2007, the department had 24 publications growing to over 30 publications reported in 2010. (Table 1) Grant funding also increased from 2007 to 2010. The total department faculty grants totaled $6,125 in 2007. This substantially increased to $121,777 by 2010. (Table 2)

Conclusions

The creation of the Community of Scholars model provided the faculty of the University of Oklahoma College Pharmacy a forum to collaborate on scholarly activities. Although cause and effect cannot be explicitly determined, an internal review has shown an increase in faculty publications and grant activity that may be related to the creation of COS groups. In addition, it is anticipated that future efforts of the program will continue to promote faculty publications and grant activity.

Using the EdCOS as a case study to describe the process, this paper outlines the process followed to support scholarly output by the faculty. Although challenges exist, such as demands upon faculty time and limited research skills, the challenges may be met through departmental support.

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Table 1: Departmental Faculty Publications

Academic Year	Number of Faculty with Publications/Number of Departmental Faculty	Total Faculty Publications	Average Publications per Faculty Member
2007	10/25	24	0.96
2008	20/25	23	0.92
2009	14/23	28	1.22
2010	16/23	33	1.43

Table 2: Departmental Grant Funding

Academic Year	Departmental Grant Funding
2007	$ 6,125
2008	$ 20,000
2009	$ 34,375
2010	$121,777

Table 3: Stakeholder Collaborations

Academic Year	Collaboration Projects
2009	College of Nursing School of Community Medicine Department of Psychiatry
2010	College of Nursing School of Community Medicine Department of Psychiatry Private Universities (in state and regional)
2011	College of Nursing School of Community Medicine Department of Psychiatry Private Universities (in state and regional)