

Peer Observation: Improvement of Teaching Effectiveness through Class Participation at a Polytechnic University

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Abstract:

An important purpose of peer observation is to provide formative feedback that will improve classroom teaching and learning. Peer observation in higher education has both quality and developmental objectives. Kennesaw State University, formerly Southern Polytechnic State University, offers a voluntary "Teaching Partners Program" open to any faculty member teaching at least one course during a semester. In this program, two faculty members, typically from different departments, are paired, observe each other's classes, and then provided feedback to each other on strengths and/or weakness that were noticed. This study identifies those faculty members that are most likely to participate in the peer observation program and analyzes their perceptions of the program. While the majority of those who participated in the program were assistant professors, motivated in part to participate by a desire to strengthen their tenure review packages, nearly all program participants said they would encourage other faculty members to participate in the program. Other institutions seeking to develop or improve their own peer observation programs for the sake of strengthening classroom teaching and learning may build upon the results from this study.

Keywords:

Peer observation, improvement of teaching effectiveness, enhancement of student learning

Introduction:

Kennesaw State University, formerly Southern Polytechnic State University, offers a voluntary "Teaching Partners Program", in which two faculty members meet, observe a period of each other's class, reflect, and then discuss strengths and areas where improvements may be warranted. Any faculty member that is teaching at least one section of one course is eligible to participate in the program during a given semester. Faculty members are typically paired with someone from outside of their own department.

Peer observation is considered by many educators to

be a key element of academic development, yet it is not widely reported as part of teacher development programs. Peer observation of teaching offers many benefits such as improvements in teaching practices, the development of confidence to teach, and the ability to learn more about teaching (Bell & Mladevonic, 2008). Peer observation is most effective when the process is designed to be non-judgmental and developmental rather than evaluative and externally required. This peer observation study was based on a voluntary Teaching Partners Program offered for nearly ten years at Kennesaw State University, formerly known as Southern Polytechnic State University. The Teaching Partner Program was overseen by the coordinator of the then Center for Teaching Excellence. The responsibilities were limited to a "call for participants" and then pairing of interested faculty. Participants were responsible for coordinating all other aspects with their pairing partner including introductions, goals and objectives, scheduling and follow up discussions.

A study reported by Bell showed peer observation of teachers to be more effective than expert coaching or workshops alone. Bell defines peer observation of teaching as: "collaborative, developmental activity in which professionals offer support by observing each other teach; explaining and discussing what was observed; sharing ideas about teaching; gathering student feedback on teaching effectiveness; reflecting on understandings, feelings, actions and feedback and trying out new ideas (Bell & Mladevonic, 2008)." Siddiqui et al. assert that peer observation can provide formative feedback that enhances self-reflection and provide rationale of student evaluations (Siddiqui et al., 2007). Faculty members may choose to participate in peer observation programs if they are interested in learning about their colleagues' teaching approaches or are interested in improving their own teaching. They are more likely to participate again if they obtained useful feedback.

Even though many faculty members voluntarily go to workshops, seminars, and curriculum development programs, they do not necessarily use what they are learning. Showers and Joyce state that evaluations of staff develop-

ment courses that focus on teaching strategies and curriculum development reveal that as few as 10% of the participants implement what they learn (Showers & Joyce, 1996). On the other hand, the benefits of peer observation programs are numerous. The observer may call attention to habits or omissions that the observed was unaware of, while the observer may learn new teaching strategies and classroom activities. Unlike summative observation, peer observation is meant to be developmental and not judgmental. Successful peer observation programs enhance communication between faculty members and provide an avenue for non-threatening, constructive feedback (Hockley, 2013). Further, peer observation is not only useful, but it is also inexpensive.

The voluntary "Teaching Partners Program" has two faculty members meet, observe a period of each other's class, reflect, and then discuss strengths and areas where improvements may be warranted. Any faculty member that is teaching at least one section of one course is eligible to participate in the program during a given semester. Faculty members are invited to participate in the program via a campus-wide email distributed by the coordinator of the program. The coordinator of the program then compiles a list of those interested in participating, pairs faculty members, and notifies each set of partners via email.

Faculty members are typically offered the option of partners and are often paired with someone from outside of their own department. This is intended to decrease the chances that a partner will be part of the other partner's future promotion committees, and thereby emphasize that the program is intended to be purely formative. The coordinator has no additional involvement once the partners have been notified.

This paper presents the results of a research study designed to identify which faculty members are most likely to participate in the "Teaching Partners Program" and to understand perceptions about the program. Such a study is an effective way to determine the program's impact and how the program contributes to improved teaching effectiveness and enhance student learning.

Research Design and Methods:

This research was conducted by members of the Research Learning Community (RLC) at Kennesaw State University. Only some members of the RLC had previously participated in the “Teaching Partners Program.” RLC members received Institutional Review Board approval to examine program records and archival data and to distribute an anonymous survey to faculty across campus.

Program records over a period of five semesters were analyzed. These records included the names of participant pairs, along with each partner’s departmental affiliation. Departmental affiliation was used to classify each participant as being from a Science, Technology, Engineering, Mathematics (STEM) or non-STEM discipline. Using the program records, archival data were used to determine the college affiliation, position, rank, and tenure status of each participant at the time of his/her involvement in the program.

An anonymous survey, developed by the RLC members, was used to collect feedback from faculty across campus. The survey, which was distributed via email with an electronic link, ran for 12 weeks. The survey questions are presented in Table 1.

Results and Discussion:

Participation in the Teaching Partners Program.

Archival data revealed that a total of 49 pairs of participants were involved in the program over a five-semester period, 10 in Fall 2012, 7 in Spring 2013, 11 in Fall 2013, 8 in Spring 2014, and 13 in Fall 2014. Out of the 49 pairs, 28 pairs consisted of partners from similar disciplines, meaning both partners were from STEM disciplines or both partners were from non-STEM disciplines. The pairs were made up of 61 individuals, who participated in the program at least once. Demographic information related to the program participants is provided in Figures 1 and 2.

The majority of the individuals that participated were non-tenured Assistant Professors. In fact, 88% of the tenure-track faculty involved in the program were non-tenured. There may be greater motivation for non-tenure track faculty to demonstrate and improve their teaching effectiveness (e.g., to maintain a contract or to seek a tenure-track position). These results suggest that additional effort may be needed to recruit a more diverse pool of participants.

Analysis further revealed that nearly half of the participants (45%), excluding those who participated for the first time in Fall 2014, had participated in the program more than once. Of those who participated in the program a second time, 12 out of 22 (55%) were first paired with someone from a similar discipline. This suggests that many participants found value in the program, and it may be beneficial for the program coordinator to pair first-time participants with a partner from a similar discipline.

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| 1 | To what department do you belong? |
| 2 | Have you participated in the Teaching Partners program at Southern Polytechnic State University? |
| 3 | How many times have you participated? |
| 4 | On average, what was the approximate time commitment (in hours) associated with your participation for a single semester? |
| 5 | If you were paired with someone from a much different discipline, did you find that increased the value of the program? |
| 6 | If you were paired with someone from a similar discipline, did you find that increased the value of the program? |
| 7 | If you were paired with a partner who had more teaching experience, did you find that increased the value of the program? |
| 8 | Briefly explain your rationale for participating in the Teaching Partners Program. |
| 9 | Would you encourage a colleague to participate in the program? |
| 10 | If you were to participate in the program in the future, would you prefer to be paired with someone from a discipline similar to your own (even if that increases the chances that your partner will be part of one of your future promotion committees)? |
| 11 | Briefly explain your rationale for not participating in the Teaching Partners Program. |
| 12 | If you were to participate in the program in the future, would you prefer to be paired with someone from a discipline similar to your own (even if that increases the chances that your partner will be part of one of your future promotion committees)? |
| 13 | Please provide any additional comments you would like to share about the Teaching Partners Program. |

Table 1. Survey Questionnaire

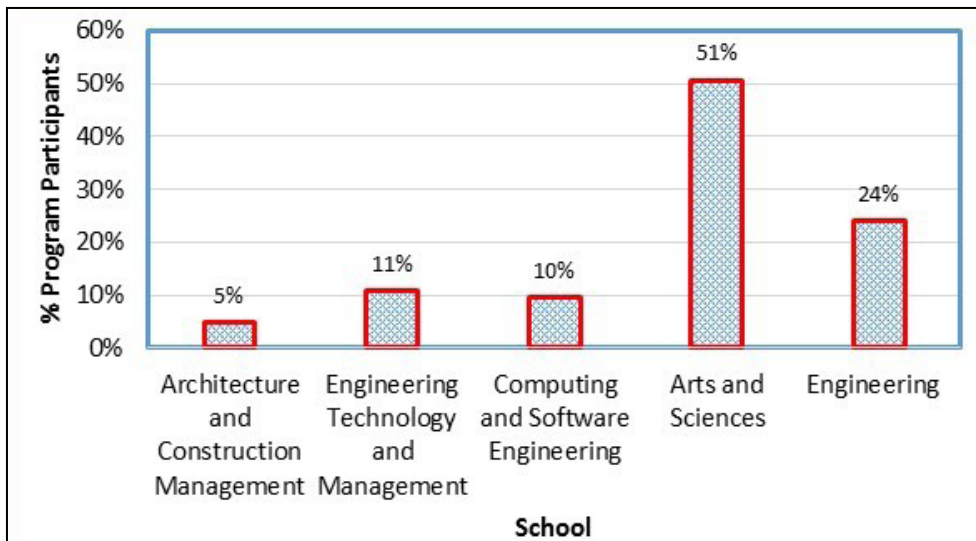


Figure 1. Program participant distribution by school

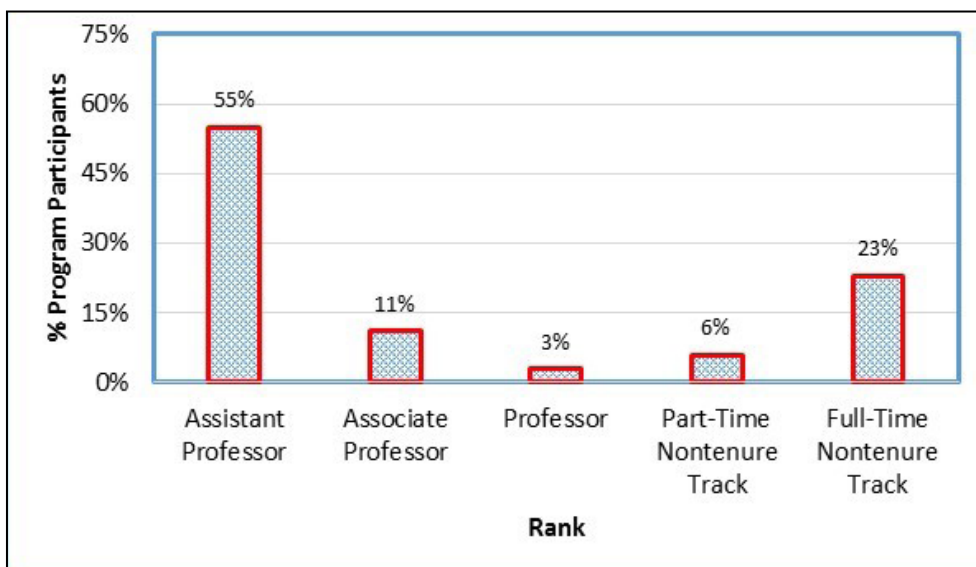


Figure 2. Program participant distribution by rank

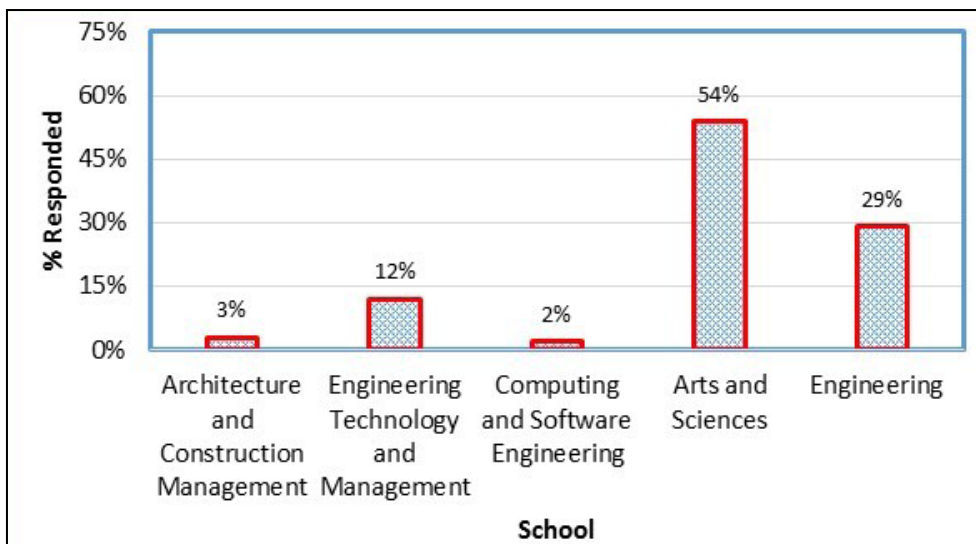


Figure 3. Survey respondent distribution by school

Faculty survey. In total, 83 faculty members responded to the anonymous survey. As shown in Figure 3, the majority of survey participants were from the School of Arts and Sciences and the School of Engineering. This was consistent with the distribution of actual program participants and is reasonable based on the faculty demographics of the institution at the time the survey was distributed.

Out of 83 respondents, 43 (52%) had participated in the peer observation program. Participants indicated that they committed an average of 4.6 hours with a range of one to 15 hours and a mode of three hours. As faculty members have busy schedules and may have concerns of being overcommitted, the average time obligation of less than five hours per semester should be emphasized when marketing a peer partner program. The majority of respondents (60%) who had participated in the program had participated more than once. The distribution of the number of times the respondents participated is shown in Figure 4. These results again suggest that most participants found the program to be beneficial in some way.

Survey comments revealed outcomes of participating and possible rationales for participating more than once. They range from learning new pedagogical approaches to partnership opportunities, useful documentation for promotion and tenure, and gaining new perspectives. Participants indicated that the program has: “Broadened the exposure of teaching styles and methodology that can capture broader student populations.”; “By observing someone else and being observed provides great tips for improving instruction. It is nice to get feedback in a low-stress environment.”; “I believed it would improve my teaching and be beneficial for my tenure portfolio.”; “Every time that I participated I learned something that I could use to improve my own teaching. I would encourage everyone to participate!”

The survey contained questions that addressed faculty members’ perceptions of the impact of their partner’s discipline and experience on the value of the program. Thirty-one of the participants had been paired with someone from a much different discipline, 28 had been paired with someone from a similar discipline, and 35 had been paired with someone who had more teaching experience. When asked whether being paired with someone from a similar or different discipline increased the value of the program, 55% of faculty members who were paired with someone from a similar discipline indicated that the pairing “did not matter” and the remaining 45% said “yes.” In contrast, faculty who were paired with someone from a different discipline were mixed in their opinions with 39% indicating that they preferred someone from a different discipline, 39% indicating that “it did not matter,” and 23% indicating that “they would have preferred to be paired with someone from a similar discipline.” The percentage of STEM faculty who would have preferred to be paired with other STEM faculty was similar to the percentage of Non-

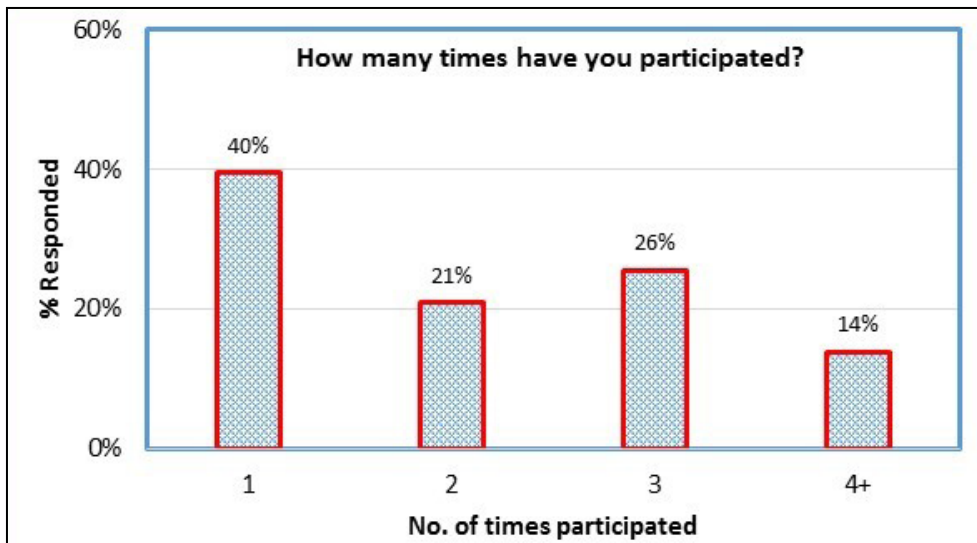


Figure 4. Respondent distribution by number of participations

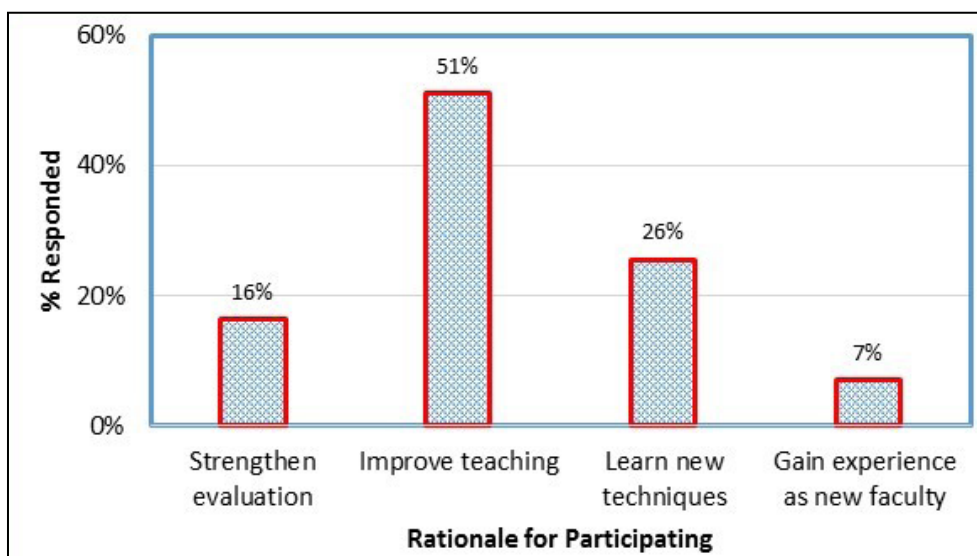


Figure 5. Rationale for participating in a teaching partner program

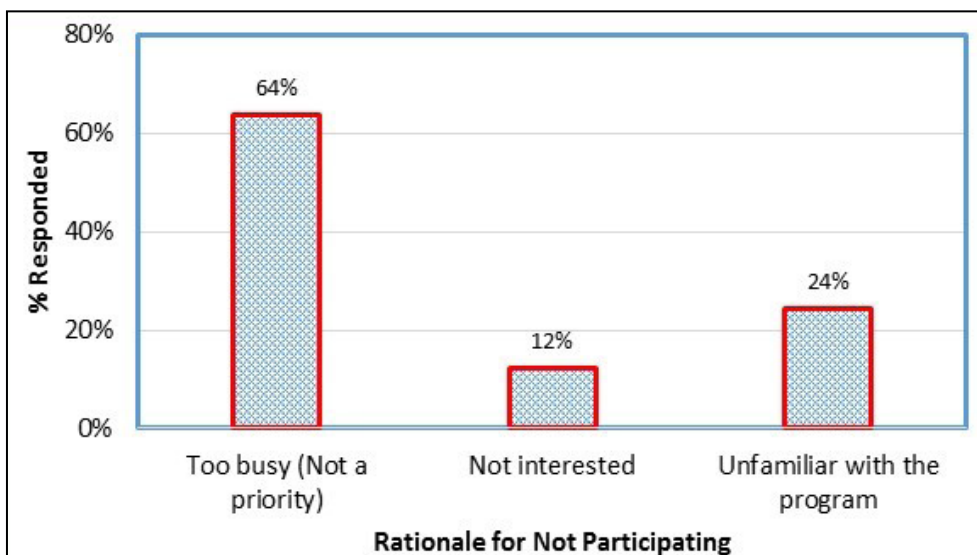


Figure 6. Rationale for not participating in a teaching partner program

STEM faculty who would preferred to be paired with other Non-STEM faculty (36% versus 40%). A majority, 54% (19 out of 35), also said that being paired with someone with more teaching was beneficial. However, the remaining 46% said that the value of the program was independent of the peers' teaching experience level.

Comments provided in the survey provided additional insights regarding pairing of disciplines, and the value of cross discipline pairings were highlighted by four respondents. Some comments included: "I wanted to learn some of the tools and techniques that professors use in other disciplines to engage students."; "It really helps me to meet with faculty from other disciplines and learn how they teach differently. This opens the window for other innovative ideas.". Of the survey participants, 54% were faculty in the Arts and Sciences where many of the non-major "core" courses are offered. At the time of the survey the Southern Polytechnic State University campus had a high percentage of students in Engineering, Architecture, and Construction Management degree programs. One faculty instructing a core course commented on partnering with a different discipline: "I learn about different disciplines, relate to students better when I understand the types of classes they are taking, regarding content, instructor expectations and modes of delivery."

These results collectively emphasize that a diverse population of program participants is most desirable. Program coordinators may find it appropriate to give participants the option of being paired with someone from a different discipline. Again, additional effort to recruit senior faculty to participate in the program is warranted.

Faculty who had participated in the program were also asked whether they would encourage others to participate. Of the 43 total respondents, the overwhelming majority (98%) would recommend that other colleagues participate in the peer observation program. Notably, 91% of the respondents said they would recommend that any instructor participate, and 7% would specifically recommend that new or nontenured instructors participate.

Despite participants being paired with partners from different disciplines or experience levels, the consensus is that most participants would encourage a colleague, at any rank, to participate in the program. Even though some feel the program is most appropriate for junior faculty, these results clearly demonstrate that participants recognize the value of the program and perceive it as beneficial.

When asked about future participation in the program, 58% of all respondents had no preference for the choice of their teaching partner's discipline, 33% responded that they prefer to have a partner from a similar discipline, and 8% responded that they would prefer a partner from a different discipline. Comparing the responses of those who had previously participated to those who had not, a lower percentage, 30% versus 35%, respectively, preferred to be paired with someone from a similar discipline. Non-STEM

faculty, who had not previously participated, said that would prefer to be paired with someone from a similar discipline more often than did STEM faculty (50% versus 31%). The majority of the respondents who had previously participated, 63%, responded that the discipline of their partner would not matter in future participation. Recall that the majority of former participants had said that being paired with someone from a similar discipline did not matter in terms of increasing the value of the program.

Being paired with partner from a similar discipline allows for evaluation of not only teaching techniques, but of discipline-specific content. However, such a pairing increases the likelihood that one's partner will be a part of his/her tenure or promotion committee. One participant commented: "I think it is more useful to participate with someone from our own discipline but I think many pedagogical methods can be shared across disciplines."

During the survey, faculty were also asked to provide their feedback and comments on the why they chose to participate or chose not to participate in the program. Figures 5 and 6 provide a summary of the responses provided by those who had and had not previously participated, respectively. The majority who chose to participate reported that the motivation was to improve his/her teaching. The majority who chose not to participate reported that it was because he/she was too busy. Proper marketing of a peer observation program should emphasize that the program will improve one's teaching and require a minimal time commitment.

The comments submitted related to the rationale given for participating indirectly identify various positive aspects of participating. "A rationale for participating is to cooperate with a colleague and share classroom strategies and lesson ideas"; "I always love new ideas"; "I can always improve my teaching having another professor observe my class and offer feedback is useful. I have enjoyed watching other classes and picking up ideas on how to modify my style"; "With the program, one can explore ways for more effective teaching methods, and make tweaks and twists in the methods as appropriate. It also helps identify the places where the most weaknesses occur"; "It lowers the silos that exist between and among us"; "It is a good program. I suggest everyone participate."

The final question of the survey read, 'Please provide any additional comments you would like to share about the Teaching Partners Program.' In total, 23 of the survey respondents who had participated (53%) provided their feedback in response to this final question. The majority of these participants' comments (78%) had a positive tone.

Analysis of the positive comments revealed some of the reasons why participants found the program to be beneficial. Two participants mentioned that the program facilitated relationship building with other instructors. Two commented that the program led to improvements in student ratings of teaching. One pointed out the benefit of including letters obtained from a teaching partner as part of his promotion and tenure review portfolio.

Seven participants suggested that the program led to improvements in teaching by revealing new concepts and approaches that could be implemented. "My teaching partner was a good observer and thus provided me with a good summary of observation. While s/he observed my engaging style of teaching but noted that I never specifically asked the class 'Do you have a question?' This struck me so much that asking this question is now part of my every lecture: at the start, within and then at the end of the lecture. And this little question allowed somewhat shy students an environment to interact with me/class"; "I tried to make the class more interactive by watching my partner's teaching. Also, by watching my second teaching partner's teaching I suggested the same"; "Observing and teaching with observation made me more aware of what I was doing and how I was doing it. I have made changes, adaptations and incorporated the Teaching Partners Program observations of others."

Notably, four faculty specifically mentioned the benefits of learning from an instructor of another discipline. "Great Program! I do think I have learned some tricks of the trade from other teachers. Aside from classroom management, it has been useful for understanding how different disciplines require different approaches." This suggests that multi-disciplinary teams or program may contribute to developing teaching skills.

Of the remaining comments made by participants, two remarked that they had not participated in the program long enough to see substantial positive impacts. The final three stated that that the program was not beneficial to them due to the lack of engagement of the partner. "We only met once"; "I do think that faculty need to be genuinely committed to the process in order for it to be a benefit for the partners." One of these three even expressed his concern that some faculty could be participating in this program only to build their resume.

The Teaching Partners Program at Kennesaw State University is an unguided observation model. Brent and Felder (2004) point out problems that may arise with such a model, which include: 1) there is no clear consensus among faculty members about what constitutes good teaching, and 2) not all faculty members are qualified to review someone else's teaching. While none of the participants in the Teaching Partners Program mentioned concerns related to either of these issues, institutions wishing to initiate or improve a peer review program may find it beneficial to provide participants with a rating form. Various forms have been published (Brent & Felder, 2004; Crabtree & Scott, 2016; Davis, 2011).

Conclusions

A formative peer observation program has been successfully implemented at a polytechnic university. The program required very little administrative oversight and was inexpensive to implement. Faculty from all five of the university's schools participated.

The main motivations for participation were reported

to be to improve teaching and to learn new teaching techniques. The other motivating rationale seems to be related to the strengthening of annual and tenure review packages. This notion is supported by the fact that 55% of the program participants were assistant professors.

Nearly all program participants said they would encourage other faculty members to participate in the program. Participants found value in the program regardless of whether they were paired with someone from a similar discipline or with someone with more teaching experience. Peer observation programs may be an inexpensive and beneficial form of professional development, particularly in teaching intensive institutions.

This study suggests that as institutions seek to initiate or improve peer observation programs, efforts to recruit a diverse population of participants are warranted. Senior faculty may be more difficult to recruit, so incentives may be necessary. Institutions could require faculty to provide evidence of participation in such a program as part of the post-tenure review process.

Potential participants must be made aware that such programs require relatively little time and offer numerous benefits. Efforts are currently underway to quantify these benefits. The effect of the program on the quality of participants' teaching will be assessed using student course performance data, as well as results from student evaluations and participant self-evaluations.

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