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Abstract

This concurrent, mixed-methods case study explores faculty valuation of economic and social rewards after participating in at least one of four educational development programs offered by our Center of Teaching and Learning (CTL) at a large, public, R1 institution. We wanted to know if the effectiveness of such programs might vary depending on the availability of economic or social rewards. To find out, we used factor analysis, t-tests, and thematic analysis on quantitative and qualitative responses from 108 faculty in an 11-item survey. Faculty reported that the value of community and importance of a stipend were important for collaborative pedagogical growth and motivation for sharing results, respectively. Both are essential for implementing change in pedagogical knowledge and practice. The findings underscore the importance of integrating both economic and social rewards because each works differently to engage faculty participants. Study implications include considerations for program design and suggestions for future research.

Keywords

educational development programs, economic rewards, social rewards, community

Faculty Perceptions of Social and Economic Rewards as Motivating Factors in Educational Development Programs: A Mixed-Methods Analysis

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This concurrent, mixed-methods case study explores faculty valuation of economic and social rewards after participating in at least one of four educational development programs offered by our Center of Teaching and Learning (CTL) at a large, public, R1 institution. We wanted to know if the effectiveness of such programs might vary depending on the availability of economic or social rewards. To find out, we used factor analysis, t-tests, and thematic analysis on quantitative and qualitative responses from 108 faculty in an 11-item survey. Faculty reported that the value of community and importance of a stipend were important for collaborative pedagogical growth and motivation for sharing results, respectively. Both are essential for implementing change in pedagogical knowledge and practice. The findings underscore the importance of integrating both economic and social rewards because each works differently to engage faculty participants. Study implications include considerations for program design and suggestions for future research.

INTRODUCTION

Educational development programs are typically designed to improve teaching and learning and have become a mainstay at most institutions of higher learning. "Educational development" is a term that encompasses various programs in higher education, including the teaching/learning usage employed in this study (POD, 2016). Typically designed and facilitated by teaching and learning centers, educational development programs may range from a one-hour long workshop to multi-day seminars and institutes. These may meet at one concentrated time, such as over a week or on a regular reoccurring basis throughout an academic semester or year. Educational development is an essential part of a university's culture; it has been noted that, in this time of rapid change, educational developers must work quickly and efficiently to implement effective programs (Sorcinelli, Austin, Eddy, & Beach, 2006; Felten, Little, Ortquist-Ahrens, & Reder, 2013). However, understanding the effect of such programs, as well as what motivates faculty to participate, is a complex and important process (Sorcinelli, Berg, Bond, & Watson, 2017).

As programs are developed and implemented, questions about faculty motivations and program effectiveness influence program designs. We based our study on Ariely's (2009, 2011) work about the difference between social and economic rewards in motivating individuals. But the author's work was not in educational development. Theall (2001) asserts that for improving their teaching, faculty are primarily rewarded by intrinsic factors; perceiving that their work has enabled their students to meet the learning objectives is highly motivating for faculty (p. 79). The issue of the relative importance of social and economic rewards in motivating faculty to participate in educational development programs is the focus of the current study.

LITERATURE ON REWARDS

The literature from behavioral economics on social and economic rewards supports the notion that people are motivated differently by the two types of rewards. Economic rewards are found to have a limited utility, compared to social rewards (Heyman & Ariely, 2004, Imas, 2014). Economic rewards often take the form of small grants or fellowships that can be used to hire support, purchase equipment, or pay for conference travel. Social rewards can be defined as positive, task-reinforcing interactions (Ariely, 2009). Social rewards are a category of intrinsic rewards, which come from within the person rather than from being derived from the organization as are extrinsic rewards (Siddique et.al., 2011).

Although there does not appear to be a great deal of literature on social rewards in educational development programs, some research exists supporting the notion that faculty respond to intrinsic motivators more than to extrinsic motivators (Siddique et al., 2011). In comparing the two types of rewards, economic rewards typically are seen as ineffective for changing long-term behavior (Gneezy et al., 2011). In an often-cited work, Deci et al. (2001) report that intrinsic motivation can be undermined by extrinsic rewards. However, their extensive meta-analysis focused on children and undergraduates. We seek to explore how economic and social rewards affect faculty members' motivation to engage in pedagogical training and development.

When we set out to examine the different rewards valued by faculty in development programs, we pursued a more specific understanding of social rewards. We sought to understand one specific social reward, a sense of community. As Hostetter and Busch (2006) state, community is built from the establishment of one's identity, brought into social interaction in a shared space, with a common language and a common culture. From Steinert et al.'s (2016) extensive review of the literature of educational development initiatives, the authors recommend that organizations use methods that help faculty build this sense of commu-

nity. They list intentional community building as one of the highly important aspects of effective educational development programs.

The Educational Development Programs

We considered how the success of our four programs varied based on the types of rewards offered. Some very successful programs (defined as faculty participation) featured social rewards, challenging our original assumptions regarding the importance of stipends. Our initial expanded analysis compared direct and indirect social and economic rewards so that we could better understand the best ways to use our limited funding and staffing resources.

At our teaching center, a variety of workshops, institutes, learning communities, and teaching research grants are offered to faculty. For some of these programs, but certainly not all of them, the teaching center encourages faculty participation by providing incentives of one kind or another through economic rewards, most often in the form of stipends or research grants. The four programs offered by the teaching center that we chose for this case study are the Active Learning Grants (ALG) program, the Course Development Institute (CDI), the Faculty Learning Communities (FLC) program, and the Scholarship of Teaching and Learning (SoTL) Grants program (See Table 1). Of these four programs, only the CDI did not offer an economic reward. However, the CDI continues to be one of the teaching center's most popular and well-attended programs, meeting a total of 16.5 hours over the duration of five days in early June of each year. Instructors of any rank and seniority can sign up for the institute, including graduate students, so long as the workshopped course will be taught within the next two semesters.

We did not consider the fact that the CDI met in June to be a factor in its overall popularity, but quite the opposite. The CDI required more of a time commitment time than the comparison programs. This should have created an even greater expectation on the part of participants to receive some form of economic reward. This not being the case is what motivated us to conduct the study in the first place. During the CDI, participants are led through a backward course design process (Wiggins & McTighe, 2005; Fink, 2011), collaborating in small working groups and receiving peer feedback each day. Participants leave the CDI with a draft syllabus that includes measurable student learning outcomes aligned with the final assessment and course goals. The fact that this program has consistently been well-attended over the past 13 years, even though it offers no financial compensation to the participants, created the impetus for us to conduct this case study. We wondered why instructors would be willing to dedicate this amount of time to improve their teaching without benefiting from any financial rewards. We wanted to understand how important the social interactions were that took place during teamwork and other highly interactive activities during the sessions, thinking that these social rewards could be important motivating factors that may be overlooked when designing and implementing similar programs.

In contrast to the CDI, the ALG, FLC, and SoTL grant programs all offered varying degrees of economic rewards, differing time commitments, and levels of social interaction amongst peers (see Table 1). These other 3 programs are open to all full-time instructors, regardless of rank, including non-tenure and tenured/tenured track faculty. Participants in the ALG program received a $1500 stipend to incorporate a single active learning activity in one course they would teach over the academic year. Only four grants were awarded each academic year, and the group met once in the fall to share their plans, and once in the spring to share their results. Our FLCs took a wide range of approaches, with some lasting a semester, and some happening over one academic year. The FLCs tackled a wide range of topics and purposes, but all shared the common denominator of meeting three to four times a semester with each participant receiving $750 in funds. The SoTL program offered four levels of grants, depending on the proposal and expertise of the instructor. Exploratory grants were awarded $1000, and Phase I through Phase III grants were respectively awarded $2000, $5000, and $12000 in funding. This case study provides an analysis of faculty reactions to these different programs.

METHODS

This case study follows a concurrent, mixed-methods design. We used exploratory factor analysis, t-tests, and thematic analysis to answer the following research questions: 1) What do faculty report about their professional growth, teaching and learning revision, and value of a teaching and learning community after participation in educational development programs? 2) What do faculty report about the value of economic and social rewards in participating in educational development programs?

Specifically, we wanted to know whether economic or social types of rewards offered to the participants may have impacted the perceived value of participation in our four separate educational development programs. To find out, we distributed Qualtrics surveys to faculty in each program offered by the teaching and learning center at our large, public R-1 institution. Faculty were emailed up to three times, as approved by our Institutional Review Board, inviting them to participate in the survey. We asked faculty about the value they placed upon economic and social rewards when participating in the four different programs offered throughout the year by the teaching center at our large, public R-1 institution. Responses were anonymous, and the study was approved by the Institutional Review Board of our university.

Survey Instrument

We designed a 9-item survey with one open ended question and 1 item with three-point, Likert-style responses (Appendix A). Eight of the 9 closed-ended items contained optional requests for open-

Table 1: Comparison of educational development programs offered by the teaching center

Program	$ to participants	Planned Hours of Interaction	Comments
Active Learning Grants	$1500	4 hours	Includes participation in public poster session
Course Development Institute	$0	16.5	4-day institute, completely voluntary
Faculty Learning Communities	$750	8 hours	Each FLC meets approximately 4 times per semester for 1 hour, both semesters of academic year.
SoTL Research Grants	$2500	One hour	Present final results and attend local SoTL event

ended comments. Participants were asked about their efforts to improve teaching after participating in a program (Q1-Q6, Q8-Q9). An additional, open-ended question was included (Q7) which asked participants to name benefits they received from participating in the programs.

After ascertaining faculty's views about the effectiveness of the programs, two questions were designed to understand participants' valuations of social vs. economic rewards. Question 10 (Q10) asked about the importance of being in a community of like-minded teachers during the programs and question 11 (Q11) asked about the importance of receiving a stipend after participating in these programs. As mentioned previously, not all program participants were offered economic incentives; however, all participants answered questions related to the importance of community and stipend. The survey was distributed online by the teaching center, with two follow-up requests by email.

DATA ANALYSIS

This is a mixed-methods study in which quantitative and qualitative methods were used to answer Research Question One, and qualitative methods were used to answer Research Question Two.

Quantitative procedures

The response rate for the survey was 43%, with an N of 108. Responses were organized into one of five groups: "ALG" for participants in the Active Learning Grants program, CDI for Course Development Institute, FLC for Faculty Learning Communities, SOTL for SoTL Research Grant Program, and MTPL for individuals who participated in multiple programs.

Responses that indicated participants were actively engaged in efforts to improve their teaching (e.g., "completely" or "very important") were coded as "3," Responses that indicated some engagement (e.g., "quite a bit" or "somewhat important") were coded as "2." Responses indicating participants were certainly not actively engaging (e.g., "very little" or "not important") were coded as 1. For questions 10 on the importance of being in a community of like-minded teachers (social reward) and 11 on the importance of receiving the stipend, a "no stipend offered" was coded as 0, indicating that economic rewards were not an option for participants in the CDI group.

We used exploratory factor analysis to construct variables that organically reflect similarities and differences in participants' experiences (Costello & Osborne, 2005). Then, independent samples t-tests were used to determine whether significant differences existed in participants' values and experiences between the funded and unfunded groups.

Qualitative procedures

Using Creswell's (2012) approach, the authors of this paper read the data separately and coded independently, and then read the codes to develop themes. They then met to discuss the process and results for each researcher. They worked together to interpret the themes and validate the accuracy of the themes, collaborating in the final narrative for the study. While there were a few outliers, there were clear themes as listed below in the discussion section. Contrasting themes were also included for accurate reporting and depth (Charmaz, 2014).

Table 2. Descriptive statistics for all Survey Items

Question	Response	#	%
1. I revised my overall approach to teaching since participating in [program].	Not Applicable	3	2.5
	Very little	14	11.9
	Quite a bit	76	64.4
	Completely	25	21.2
2. I revised the course I worked on during the [program].	Not Applicable	4	3.4
	Very little	17	14.4
	Quite a bit	68	57.6
	Entirely	28	23.7
3. I am reading more literature on teaching and learning (including peer-reviewed publications, blogs, listservs, etc.) since participating in [program].	Disagree	38	32.2
	Unsure	19	16.1
	Agree	61	51.7
4. I have participated in other activities on teaching and learning, such as attending workshops, joining other learning communities, attending a conference, etc., since attending the [program].	Disagree	14	11.9
	Unsure	4	3.4
	Agree	100	84.7
5. I have shared with others the changes in my teaching practices and my ideas about teaching and learning since participating in the [program].	Disagree	6	5.1
	Unsure	8	6.8
	Agree	104	88.1
6. I am more respected by my colleagues on matters of teaching and learning, since participating in the [program].	Disagree	19	16.1
	Unsure	64	54.2
	Agree	34	28.8
8. How important was being in a community of like-minded teachers during [program]?	Not important	5	4.2
	Somewhat imp.	29	24.6
	Very important	84	71.2
9. How important was receiving a stipend for participating in [program]?	No stipend offered	51	43.2
	Not Important	30	25.4
	Somewhat imp.	23	19.5
	Very important	14	11.9

Note. Questions 7, 10, and 11 were omitted from this table bcause they were open-ended iterms.

RESULTS

The total sample size after accounting for missing data included 108 individuals, with the majority (nearly 90%) of participants coming from the CDI or FLC programs, and a few who participated in multiple (MTPL).

Factor Analysis and T-Tests

Results from an exploratory factor analysis of 7 survey items revealed two factors based on high loading variables which

explain 60% of the variance (Table 3). We labelled the factors as: (1) Value of Community and Socio-Emotional Growth and (2) Value of Economics and Instrumental Growth. These two factors were used as two composite variables in subsequent statistical and qualitative analyses. Exploratory factor analysis is an inappropriate method to draw substantive conclusions (Costello & Osborne, 2005). As such, independent samples t-tests were used to determine whether funding affects attainment of participants' respective programmatic outcomes between: "Value of Community and Socio-Emotional Growth" and "Value of Economics and Instrumental Growth." Both variables met assumptions of independence, normality, and homogeneity of variances. Results are summarized in Table 4.

Table 3. Factor Loadings for Rotated Component Matrix for 10 Survey Items (n=108)

	Factor Loading	
	1	2
I revised my overall approach to teaching since participating in the [program].	.798	
I am more respected by my colleagues on matters of teaching and learning, since participating in the [program].	.614	
Since participating in the [program], I am reading more literature on teaching and learning (including peer-reviewed publications, blogs, list serves, etc.).	.609	
How important was being in a community of like-minded teachers during the [program]	.566	
Since participating in the [program], I have shared with others the changes in my teaching practices and my ideas about teaching and learning.	.553	
I revised the course I worked on during the [program].		.822
How important was receiving a stipend for participating in the [program]?		.651

Research Question One

The first question that guided this study was: What do faculty report about their professional growth, teaching and learning revision, and value of a teaching and learning community because of participation in educational development programs?

Value of Community and Socio-Emotional Growth.

An independent-samples t-test was conducted to answer RQ1, whether participation in funded groups or unfunded groups has differences in achieving program outcomes. Professional growth outcomes were defined by the goals of the educational development program, which may include pedagogical growth, teaching and learning revision, and value of a teaching and learning community. The test was significant, $t(115) = 1.73$, $p < .05$. Faculty who participated in funded groups (ALG, LFC, MTPL, SOTL) had higher means (M = 12.1, SD = 1.93) than those who participated in the unfunded group (CDI, M = 11.4, SD = 2.41). The 95% confidence interval for the difference in means was small, and it ranged from –1.51 to .103. Effect size estimate, expressed as *g*, was between small and medium (g = -.33). Overall, those in funded groups were associated with reaching their program outcomes, compared to those who were in in unfunded groups, with a statistically significant difference observed between the two groups. The effect size suggests that the difference was not middling, and on the smaller side.

When asked how important it was to be in a community of like-minded teachers, participants wrote about appreciating the feeling of connection to other faculty, especially outside their own department, and how useful it was to work with people who had similar interest in teaching. For the variable *Value of Community and Socio-Emotional Growth*, respondents stated benefits from the simple ("great way for me to identify books worth reading") to the profound ("radically altered my academic career"). For some, it helped them gain recognition at the college and national level. Others mentioned preaching "the gospel of backward course design." A strong theme was the feeling of connecting with a community, as expressed in comments such as the following statements from different people: "I feel very isolated in my home department." "We NTT (non-tenure track) have few ways to interact." "I appreciate any opportunity to talk with others who care about teaching well." And "It's useful to have that kind of community, because they are typically the source of good ideas for my own teaching." Several subthemes were identified in the qualitative analysis, with examples of themes in the comments below:

> *Process:* One mentioned that the workshop improved their timing for discussions, helped them to rethink the syllabus and the purpose of the class, and helped them redesign the course.
>
> *Collegiality:* One enthusiastic participant shared this comment, "Collegiality across campus! A community!," while another stated simply that the workshop was indescribably important. Another agreed that it was important to be in a community of diverse teachers. Similarly, one person wrote, "It was great to observe other faculty going through the same process with their varying course content. This helped to make it clear that the approach is applicable to all disciplines and fields."
>
> *Knowledge:* Several respondents mentioned that they were able to connect with other instructors to share methods and approaches, which helped them to understand a new generation of students.

Table 4. Independent Samples T-Tests of Variables

	Funded		Unfunded		*p*	*df*	*t*	Cohen's *d*
	M	*SD*	*M*	*SD*				
Value of Community and Socio-Emotional Growth	2.1	.98	1.4	.41	.043	15	-1.73	-.327
Value of Economics and Instrumental Growth	.1	.10	.1	.24	<.001	105	-4.29	-.857

Note. Funded groups include AIG, FLC, SOTL, MTPL. The unfunded group is CDI.

Value of Economics and Instrumental Growth

An independent-samples t-test was conducted to evaluate research question one ("What do faculty report about their professional growth, teaching and learning revision, and the value of a teaching and learning community as a result of participation in educational development programs?"). The test was significant, $t(105) = 4.29$, $p < .05$. Faculty who participated in funded groups (ALG, FLC, MTPL, SOTL) had higher means (M = 3.80, SD = 1.64) than those who participated in the unfunded group (CDI, M = 2.52, SD = 1.32). The 95% confidence interval for the difference in means was small, and it ranged from –1.86 to –0.72. Effect size estimate, expressed as *g*, was large (g = -.86). Overall, these statistics suggest that participation in funded groups is associated with significantly higher reported outcomes related to professional growth, teaching and learning revision, and the perceived value of a teaching and learning community compared to participation in unfunded groups. The large effect size further emphasizes the practical significance of these findings.

Respondents were enthusiastic about the *Value of Economics and Instrumental Growth*. They expressed appreciation for a stipend, as it enabled them to present at national conferences and gain research funding. As one participant wrote, "The FLCs have been significant in terms of the time commitment and outcomes!" Another realized that having a stipend helped them justify the time to their spouse. Others mentioned the benefit of having time and space to "think through changes I wanted to make," or to provide a major course redesign that made "students' work more meaningful."

> *Identified objectives:* One faculty member commented that the community helped them to articulate their goals and aims, both for the class as a whole and for specific course activities.
>
> *Critique and collaboration:* Participants mentioned the usefulness of having differences of opinions when it came to increasing their knowledge about teaching. One stated an appreciation of having differences in thinking to help clarify their own thoughts towards changing their teaching efforts.
>
> *Course design:* Participants reported that the workshops provided a helpful framework for course design, added to their arsenal of teaching methods.

Research Question Two

The second research question that guided this study was: What do faculty report about the value of economic and social rewards in participating in educational development programs? To answer this, we asked faculty two questions in our survey: how important was it to be involved in these types of faculty communities and how important was it to receive a stipend to participate in these learning communities? Overall, faculty revealed that social gains led to growth in knowledge and a sense of support from their peers across the institute. Regarding stipends, responses ranged from willingness to participate without a stipend to unwillingness to participate unless a stipend was provided.

First, participation in these programs contributed to social gains *and* knowledge development because of social connections. Respondents shared how joining a teaching community was "reassuring" and "validating." One faculty member put it simply when they wrote that they now "[realize] that I am not alone when it comes to trying to develop new ways to teach a course." Another participant said that the social aspect was crucial to faculty development; they wrote, "the community helped me to articulate what my goals and aims were- both for the class as a whole as well as for specific course activities." A third participant noted that they were "helped to understand [a] new generation of students" because they "connected with other instructors to share methods and approaches." Another said, "[I was exposed] to flipped classroom ideas, motivation to develop some software teaching tools for the course, opportunity to try out these ideas and get feedback, learn about approaches taken by teachers from other disciplines from my own." Faculty highlighted their personal gains of knowledge and confidence with different pedagogical concepts. One respondent was able to apply concepts to new courses and said, "I have a stronger framework for developing courses and I feel more confident and efficient when approaching new courses as well as in refining established courses." Another said that they were able to redesign their course from the structure to the format, "Improved my timing for discussions, helped me to rethink my syllabus and the purpose of the class, helped me redesign the course."

When asked about the value of receiving a stipend to participate in professional growth activities, many respondents stated they participated without receiving one. While they stated that they would not turn down a stipend, the comments indicated that the work was the attraction, rather than financial compensation. Several mentioned that they had not been offered a stipend, and it would not have made a difference if they had. In the cases where financial support was necessary, faculty said that their research would not have continued if it were not for the funding. One faculty wrote, "Had I not been for a stipend we wouldn't have launched this research." Another said that financial rewards were crucial for disseminating the research: "My stipend allowed me to present at a higher ed teaching conference- I would not have gone otherwise."

Some who did receive a stipend made comments such as these: "It was a very nice benefit, but I would have likely participated without the stipend." And "Can't remember if there was a stipend. Worth it either way! Wait, yes there was. And it was nice, but it was not the incentive to do it." This is not to imply that a stipend has no value, as they stated that it helped justify the time spent to their spouse (showing that the connection between work life and home life matters to this participant). It was also mentioned that as a non-tenure-track faculty member, they have few ways to expand their "meager" earnings so a stipend would have been greatly appreciated. Writing with humor (and apparent truthfulness), one participant wrote, "I would really like a stipend. You are welcome to contact me about this stipend at [email address].

Overall, we received more positive feedback about the opportunity to participate in a community than receiving a financial stipend. In fact, many of the respondents participated in the program where there was no stipend available, indicating that some will work toward improving teaching with no financial rewards at all. Social and personal knowledge gains can motivate faculty to participate in teaching improvement programs. Note that we did not ask faculty directly to compare the importance of community vs. stipend. We felt this could set up a forced choice that does not necessarily exist and does not properly unpack how program participants value community and stipends. Asking them

to rate the power of each one was a way to learn what they felt motivated them.

LIMITATIONS

The limitations of our study should be considered in the interpretation of the findings. First, the study was limited by the response rate of 43%, as well as the fact that we cannot substantiate the self-report that faculty made improvements to their teaching after participating in the programs. While the self-report on teaching changes by faculty can be useful, as seen in the literature review by Steinert et al. (2016), other work has found that there can be a difference between what faculty say they do, and what they actually do (Ebert-May, et al., 2011).

Because we developed the survey to ascertain the perceptions of our faculty participants in educational development programs, the survey has not undergone extensive testing regarding its reliability. We do have evidence of face validity (Gravetter & Forzano, 2018) from survey scrutiny at conferences and with consultants. And our exploratory factor analysis lends some insight to the independence of observed variables associated with participation in faculty development programs. This study provided a starting point for future research on the effects of different rewards in educational development programs.

We suggest that the results from this case study, while not transferable, may be generalizable to similar contexts (Creswell, 2012). Other higher education teaching centers designing educational development programs to encourage the adoption of evidence-based teaching practices can use similarities in program designs to consider whether our findings might be important considerations.

DISCUSSION

Overall, our findings suggested that receiving funding influences statistically significant differences in whether participants reached professional growth (the programmatic outcomes), but (2) individuals differed in how they valued economic and social rewards from participating in educational development programs. While economic rewards support participants in reaching their programmatic outcomes (e.g., going to a SoTL conference), participants also highly valued social rewards for different reasons. Creating community and receiving social support from peers felt rewarding and motivating, suggesting that community-based educational development programs are innately rewarding for participants. Economic rewards (e.g., stipends, professional development funds) helped some participants fund means to share their findings publicly in conferences and/or help to justify optional participation in educational development on top of a busy schedule of teaching and disciplinary research. These findings are aligned with those in the literature. Benander (2009) indicated that instructors who have "returned to being students in one context or another…seem to report lasting and deep changes in their teaching as result of their critical reflections on being a learner" (p. 36). Additionally, Heyman and Ariely (2004) found social rewards were related to internal motivation, which may be more enduring than economic rewards. As facilitators and participants, the authors have experienced first-hand the effectiveness of educational development programs that build a collaborative community, but we had no evidence of its effects on others. And, often, social rewards have not been a central design in fostering faculty change. The reported rewards in our study empirically support what our teaching center and many other centers around the country have been doing for years. We can now confirm that efforts to foster social interactions do have a positive influence on faculty as they revise and edit their pedagogy.

Building community in professional development is an "effective source(s) of support for instructors when they are exploring new teaching and learning techniques" (Becket et al., 2012, p. 74). However, we also want to emphasize that economic rewards have importance in educational programs to motivate faculty to participate, either in the program or in disseminating research. Our intention is not to establish an either/or paradigm. What we are suggesting is that economic resources should be used to encourage social interactions whenever possible. For example, one possibility would be to provide a travel grant for faculty to share their SoTL research at a national or international conference, or to tie the grant award to a public presentation of some kind for the social rewards it would bring. Afterall, one of the principles of good practice in SoTL is to make the results "appropriately public" (Felton, 2013). And, as indicated in our results, some faculty were not able to participate or to present their research if it were not for the funding we provided.

IMPLICATIONS FOR PRACTICE AND RESEARCH

Our findings support the following considerations for educational development practice and future research. Regarding practice and research to small extent, we suspect that the research could also be continued by examining whether a faculty member's valuations of economic rewards and social rewards differ depending on which programs they participated in. Some programs, such as learning communities, are designed with far more interaction than a research grant, for example. Educational developers who design programs should consider participants' motivations for joining. For example, is a person who signs up for a Faculty Learning Community, with built-in group meetings, more likely to value social rewards than someone who signs up for an Active Learning Grant, which has no group meetings? Faculty with different priorities may value social vs. economic rewards differently. Educational developers should explicitly share goals for each program or opportunity to clearly set expectations for faculty participants. This study reinforces the need for further research on the factors that motivate faculty and instructors to participate in educational development, namely in the following areas: how intrinsic motivators may influence social and economic rewards as extrinsic motivators and whether differences in institutional culture and resources influence valuation of rewards, and how participant identity may be a factor in variations in valuation of rewards.

First, our findings that economic and social rewards are valued differently by participants can be complicated with examination of intrinsic and extrinsic motivation. Both economic and social rewards reside with extrinsic motivation; how does a participant's valuation of rewards interact with intrinsic reasons for joining educational development programs? Future studies could investigate the intrinsic factors such as personal interest, passion for teaching, and sense of fulfillment that drive faculty and instructors to engage in educational development activities. Additional examples of extrinsic motivators, such as recognition and career advancement could also be added in future studies. A comprehensive model of faculty motivation and valuation of rewards for

joining educational development programs could add consequentially to the field and guide programmatic design.

Second, studies across different types of educational institutions could give insights into how institutional culture, resource allocation, missions, and policies influence faculty engagement in educational development. Understanding commonalities and disparities in the factors motivating faculty participation may yield generalizable strategies for promoting engagement in educational development.

Lastly, exploring how faculty's individual identity and backgrounds intersect with valuation of rewards in educational development is a step toward diversifying participation in educational development programs. The following includes various identities and backgrounds but is not exhaustive: gender, race, ethnicity, nationality, disability, neurodiversity, discipline, and academic rank. Knowledge of how identities (and intersectional identities) may influence variations in valuation of social and economic rewards allows for more nuance in the design of programs to reach and retain a larger faculty audience. Actions that result from such a study are steps toward supporting teaching development among faculty who have not traditionally participated or those with minoritized identities and backgrounds.

CONCLUSION

Based on our results, it seems reasonable to take into consideration what others have revealed about the power of economic and social rewards in motivating educators to participate in faculty development programs. We recontextualized this phenomenon in faculty development programs and determined that there was a clear theme of participants determining the need to work on, continuing to work on, and increasing work on course planning in a social, collaborative manner. Economic rewards appear to be necessary in motivating some faculty, and they are certainly necessary for others to attend conferences to present research about their teaching. A greater understanding of the nuances of education developmental programs will be helpful to those who design and seek funding for programs, both now and in the future. Programs that build a sense of community on a campus can lead to consensus building and integrated initiatives that benefit the campus as a whole.

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APPENDIX A.: REFRAMING ACADEMIC PROGRAMS SURVEY

1, I revised my overall approach to teaching since participating in the [program].
- Very little 1
- Quite a bit 2
- Completely 3
- Not applicable 0

Please feel free to comment on this question (open ended response):

2. I revised the course I worked on during the [program].
- Very little 1
- Quite a bit 2
- Entirely 3
- Not applicable 0

Please feel free to comment on this question (open ended response):

3. Since participating in the [program], I am reading more literature on teaching and learning (including peer-reviewed publications, blogs, list serves, etc.).
- Disagree 1
- Unsure 2
- Agree 3

Please feel free to comment on this question (open ended response):

4. I have participated in other activities on teaching and learning, such as attending workshops, joining other learning communities, attending a conference, etc., since attending the [program].
- Disagree 1
- Unsure 2
- Agree 3

Please feel free to comment on this question (open ended response):

5. Since participating in the [program], I have shared with others the changes in my teaching practices and my ideas about teaching and learning.
- Disagree 1
- Unsure 2
- Agree 3

Please feel free to comment on this question (open ended response):

6. I am more respected by my colleagues on matters of teaching and learning, since participating in the [program].
- Disagree 1
- Unsure 2
- Agree 3

Please feel free to comment on this question (open ended response):

7. What are four (or more) benefits you received from participating in the [program]? *(open ended response)*

8. How important was being in a community of like-minded teachers during the [program]?
    - Not important 1
    - Somewhat important 2
    - Very important 3

Please feel free to comment on this question (open ended response):

9. How important was receiving a stipend for participating in the [program]?
    - No stipend offered 0
    - Not important 1
    - Somewhat important 2
    - Very important 3

Please feel free to comment on this question (open ended response):