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# Faculty Empowering Faculty: SoTL Leaders Catalyzing Institutional and Cultural Change

## ABSTRACT

Faculty are increasingly interested in engaging in the scholarship of teaching and learning (SoTL) across disciplines, necessitating educational development support. While many institutions utilize one-time workshops and faculty communities offering professional development funding, the case study presented in this article takes a different approach. The aim of the Engaged Teacher-Scholar (ETS) program is to support faculty growth in a process of becoming ETS leaders across the university campus. ETS leaders advance an individual SoTL research project and are trained to develop a plan for and offer professional development events to their department, college, and university related to SoTL. The article presents an overview of the program's objectives, organization, and outcomes over four years of implementation. The article concludes with implications for implementation at other institutions.

## KEYWORDS

faculty development, case study, change catalysts

## BACKGROUND AND CASE STUDY DESCRIPTION

The case study in this article contextualizes, through substantial description, a story of how faculty seen as SoTL “leaders” were identified, supported, and encouraged to advocate for SoTL cultural change at the department and college level at James Madison University, a large public university in the South Atlantic United States. With this direction of wider institutional change, the primary aim is not only to promote conversations about SoTL among university faculty members, but also to promote institutional cultural change. In our efforts to support high-quality, evidence-informed teaching and learning that nourishes students’ intellectual, emotional, and, perhaps, inner life, educational developers and SoTL scholars need to keep both the big picture aims and the daily details of envisioning, facilitating, and assessing high impact faculty programs in mind. Distinct from SoTL approaches in educational development that create faculty communities to encourage scholarly productivity (Richlin and Cox 2004), the Engaged Teacher-Scholar (ETS) Program that we discuss in this article supports individual inquiry into teaching and learning while simultaneously attempting to catalyze unit-level (department and college) conversations around SoTL. The goal is to advocate for more inclusive

understandings of scholarship, rewards systems, and better quality teaching at our specific university and in higher education more broadly.

Educational developers, also called faculty developers, often facilitate learning and change at both individual and organizational levels. Thus, the ETS Program is designed to facilitate growth and innovation for the individual and to begin the process of organizational change through a faculty-developing-faculty model. At the individual level, the program offers faculty support in creating and sharing evidence-informed teaching and learning scholarship. Additionally, the program aims to support faculty growth in a process of becoming ETS leaders across campus, creating the opportunity to extend change beyond the individual to the institution.

The development of the program and our analysis of its impacts were influenced by diffusion of innovation theory, namely, that the spread of ideas happens through early adopters who share more broadly within a system until saturation is reached (Rogers 1962). Additionally, we utilized a community of practice model (Lave and Wenger 1991), one that encourages substantive conversation and “joint enterprise,” to move SoTL conversations into departments. Engaged Teacher-Scholars view teaching and learning from a scholarly point of view and share that practice and orientation with others. Whether their work is called discipline-based education research, teaching inquiry, or scholarship of teaching and learning, these scholars are educators who engage in evidence-informed teaching and learning research activities.

This article situates an intentionally designed SoTL educational development program in a broader conversation about how to support faculty and catalyze conversations that have the potential to institutionalize cultural change. This descriptive case study will aid readers in understanding and scrutinizing some of the assumptions of this program, as well as help to clarify the direction of future research projects (Mills, Durepos, and Wiebe 2010). A detailed description of the program design and how it is situated in the literature will be provided, in addition to data regarding faculty outcomes from engaging in the program. Finally, we provide considerations for implementing this type of program at other institutions.

### **Why did we start the ETS Program?**

The ETS Program emerged from past “failures” in SoTL programming and resilient aspirations to sustain ongoing conversation in higher education. With Boyer’s model including Scholarship of Teaching as one of the types of scholarship to pursue for faculty in the United States (Boyer 1990), faculty are increasingly engaged in SoTL across disciplines, which has brought about the need to provide support and educational development to academics engaging in such work, often provided by the university’s center for teaching development (Schwartz and Haynie 2013). This type of support may be particularly important for faculty who received training in appropriate disciplinary research but may not have received similar training in SoTL. There are several ways for educational development centers to support faculty SoTL work, including individual consultations, university-wide programs, grant funding, information about conferences and relevant journals, referrals to campus SoTL experts, and faculty communities (Schwartz and Haynie 2013). This variety of approaches aim to support faculty in their pursuits of SoTL.

In line with the Center for Faculty Innovation and scholarship area program goals (Center for Faculty Innovation 2021), multiple single programs were offered between 2010 and 2014, including 60-

to 90-minute scholarly talks, workshops, roundtables, and some multi-day institutes that helped faculty examine SoTL literature and develop a SoTL research project. These programs were effective at raising consciousness about SoTL as a field of inquiry and helped faculty think about developing SoTL research questions and projects. However, they did not seem to raise departmental- and college-wide conversations about teaching as a scholarly endeavor, or about systematic and long-term inquiry into teaching and learning. Some of the previous SoTL programming in the Center had low faculty participation numbers. In addition, there was little impact on driving an institutional conversation about diverse forms of scholarship beyond the scholarship of discovery that is more frequently seen at more research-focused universities. Additionally, after multi-day institutes, at first called Scholarship of Teaching and Learning Institutes and then changed to Teaching Inquiry Institutes, faculty were offered small stipends to complete deliverables on SoTL research projects (e.g., IRB submissions, conference presentations, publication submissions). The trend over a few years was that very few participants followed through with these deliverables. Members of the Center's team discussed these challenges and realized other forms of programming were needed to both encourage individual faculty members in their SoTL work, as well as to catalyze university-wide conversations on the importance of systematic inquiry into teaching and learning. It is important to note that within these endeavors resided an implicit advocacy for promoting diverse forms of scholarship in higher education. The intention of this specific program was to not only support individual SoTL scholars, but also to advance change at the university.

Both the learning theory and theory of change that undergirds SoTL initiatives need to be examined in ongoing ways in the work of educational development, and the ETS Program is no exception. For years, the Center for Faculty Innovation described in this case study has embraced a "community of practice" (CoP) approach, where those faculty members who hold skill, knowledge, or expertise openly share knowledge, skills, and passion with others in faculty learning communities (Lave and Wenger 1991). Rooted in "situated learning," the intention of a community practice approach is to move novice participants from peripheral to core participation through "mutual engagement," "joint enterprise," and "shared repertoire" (Wenger 1998, 13). In the ETS Program, the joint enterprise is the systematic study of teaching and learning. Mutual engagement occurs in faculty communities working together, in other words, in formal meetings and conversations about SoTL projects and during department- and college-level events with colleagues where conversation focuses on teaching inquiry. The "shared repertoire" is a little more difficult to describe, yet shows up in the habits of systematic reflection on learning outcomes, pedagogy, and other elements of teaching and learning that occur as part of the structure and requirements of the program described later. This "situated" approach to learning taps into existing strengths of faculty members within the university and spreads the knowledge, skills, and passion to do SoTL work more broadly and pervasively, attempting to diffuse innovations (Rogers 1962). Levinson and Brantmeier (2006) maintain, "communities of practice are seen as social sites for the most powerful kind of learning. Because they involve co-production of identity, communities of practice anchor learning in the enduring structures of the self" (325). In terms of diffusion of innovation, the community of practice model serves to spread the passion, skills, and habits of critical and reflective thinking to other university instructors and cultivates an institutionally supported identity—a teacher-scholar. The CoP model serves as the foundational learning theory of the ETS Program, one that aims to elevate teacher-scholars who do SoTL work.

Related to the communities of practice model, Faculty Learning Communities (FLCs) aim to deepen and sustain faculty engagement in SoTL work, seeking to help a small group of faculty develop skills (Cox 2003). FLCs very often contain SoTL components. For example, Richlin and Cox (2004) surveyed over 100 institutions that utilize FLCs and found that more than half focused on developing faculty's scholarly teaching activities (e.g., course redesign), three-quarters encouraged the on-campus presentations of SoTL work, two-thirds involved presenting SoTL work off-campus, and one-third focused on publication of SoTL work. While faculty communities might have an advantage over one-time programs and institutes at sustaining individual and group productivity, they are unlikely to catalyze institutional change. Kenny, Watson, and Desmarais (2016) outlined three necessary components to supporting SoTL at an institution. These include having commitment from the administration, reward and recognition for SoTL work, and networks of SoTL scholars.

The ETS Program emerged as a programming initiative to achieve two overarching goals, providing a framework for *output*, *outcome*, and *impact* (Quinn Patton 2018) of the program, by targeting two tiers of constituents (faculty and administrators): (1) to recognize faculty who engage in meaningful, evidence-informed teaching and learning scholarship and who wish to become ETS leaders across our campus, and (2) to raise the awareness of SoTL across the colleges. Program *output* includes actions we have taken and how ETS leaders engaged in these actions, *outcome* includes the results of the output and how ETS leaders were able to change thinking and actions, and *impact* includes larger, institutional change based on output and outcomes of the program. Thus, given the Center for Faculty Innovation and scholarship area outcomes, using a backward design model (Fink 2013), and considering the *output*, *outcome*, and *impact* conceptual framework, the ETS Program encourages faculty to make progress toward the following: 1) *output*: advancing individual SoTL projects, 2) *outcome*: catalyzing unit-level teacher-scholar conversations, 3) *impact*: generating university-wide dialogue on high impact practices.

### **How did we start the ETS Program?**

This history of funding the SoTL program is clearly a consideration for replicability and scalability elsewhere. The initial funding for the ETS Program came from a United States National Science Foundation (NSF) CAREER award (#0846468) to one of the co-authors (Pierrakos) and was part of the educational component of the NSF CAREER award to broaden the reach of discipline-based educational scholarship. After the initial year of success, in terms of scholarly output and community-building, the Center for Faculty Innovation decided to continue funding for this program as part of the operating budget. This includes approximately \$8,000 US Dollars (USD) for the eight selected ETS faculty members (\$1,000 each), and \$6,000 USD annually for a faculty member working as an educational developer to oversee the project as the ETS Program liaison.

### **What happens in the ETS Program?**

In line with the Center for Faculty Innovation's faculty empowering faculty ethos, the ETS Program is administered by a rotating faculty member who serves as the program liaison. Through a competitive application process where faculty are asked to identify their experiences and expertise in SoTL, selected faculty members participate in a teacher-scholar "community of practice" (Lave and Wenger 1991), as described above. Engaged Teacher-Scholars meet as a group once the year before for

orientation and twice each semester to learn about program planning and evaluation, build community among the ETS leaders, and engage in other professional development opportunities based on program-specific needs as assessed by the program liaison. Agendas for the meetings include a focus on community building, strategies for advancing individual scholarly projects, and developing SoTL programs. Each semester, ETS leaders plan, implement, and evaluate at least one event for their department or college, as well as collectively plan and implement one university-wide event. These events are catered to the unique interests, needs, and language of teaching inquiry as situated within the Engaged Teacher-Scholars discipline (for specific examples see the section “Outcomes from department and college SoTL programs”). For their work, each ETS leader receives up to \$1,000 USD in professional development funds to support their personal research efforts (e.g., disseminate SoTL work, attend professional development opportunities, travel to conferences, workshops, etc.). In the past two years (2017–2019), there was a thematic focus for the ETS Program related to implementing and evaluating high impact practices.

ETS leaders reflect on the success of their programs both orally in meetings and in writing. This process of evaluating the programs offered by ETS leaders offers an opportunity for self-reflection on what each leader, as well as their colleagues, gained from their programmatic efforts. Additionally, evaluations are completed by participants in each program offered by ETS leaders. At the end of each semester, the ETS leader self-reflects on how the data might impact their own work as a leader, scholar, and/or organizer of SoTL programming in the future. They also provide information about progress made on their research projects including IRB applications, conference presentations, publications, and funding to further their individual work. Finally, ETS leaders’ self-reflections include quantitative and qualitative reflections on their progress toward program and individual goals.

## OUTPUT, OUTCOMES, AND IMPACT OF THE ETS PROGRAM

### **Methods of data gathering and analysis**

Each semester, the ETS leaders complete a self-evaluation that outlines three parts: (1) the individual outcomes achieved during the semester (e.g., conference presentations, progress on research projects, publications, etc.), (2) information about the professional development programs they planned and implemented (e.g., titles of the events, number of and feedback from participants), and (3) a quantitative and qualitative reflection related to progress on the program’s outcomes (e.g., rating the extent to which they agree they made progress on the program outcomes, reflections on successes and challenges faced, plans for subsequent semesters, and after the ETS Program ends). Additionally, each semester the ETS Program liaison compiles and summarizes the individual reflections into a summary report for the program. These summary reports are de-identified and shared with ETS leaders. It is important to note the questions required on the evaluations changed slightly each year. For example, the program outcomes have evolved, differing levels of detail were requested for the unit events, and ETS leaders were given the opportunity to re-apply for subsequent years.

IRB approval was sought to obtain consent from the individual ETS leaders to use the data reported in their semester self-evaluation reports. These report records were maintained by the Center, yet contained identifiable information. Of the 21 former ETS leaders (2015–2019), 20 had available email addresses where information about this study was sent. We sent emails seeking consent to utilize de-identified self-evaluation data to 20 ETS leaders and after two reminders, a total of 12 replied

agreeing to allow the research team to use their self-reported data. The remaining eight did not reply and thus their individual self-evaluation reports were not used for the analysis in this study. However, if information was included in the overall summary evaluation written by the ETS Program liaison, it was already de-identified and thus was used for these results as it was not possible to determine which ETS leader was being referenced.

Two raters (both former ETS Program liaisons) used open coding (Corbin and Strauss 1990; Glaser and Strauss 1967) to perform the analysis of open-ended responses on the evaluation forms. The raters stayed close to the explicit meaning of the written text. Each independently read the evaluation reports and noted emergent themes. The raters then met to discuss the themes and discussed convergence/divergence. Where necessary, themes were combined/re-named and then both raters took the agreed upon themes and independently identified exemplars from the qualitative data (presented below). Additionally, three of the authors worked to identify and aggregate the numerical data presented in the reports. Most data presented below include counts involving simple addition. Where available, numerical self-report data is presented as an average. The summary reports written by the program liaisons varied from year to year, which resulted in some missing data.

### **Description of ETS leaders**

Across the years 2015–2019, the majority of ETS leaders were women (N = 16/21) and represented a variety of disciplinary backgrounds. Except for one college, there was at least one ETS leader from every college across the institution. Based on the recollection of the ETS liaisons, the majority of ETS leaders were assistant professors during their time in the program, though, some were associate or full professors. Few held temporary instructional positions (e.g., adjunct) while an ETS leader.

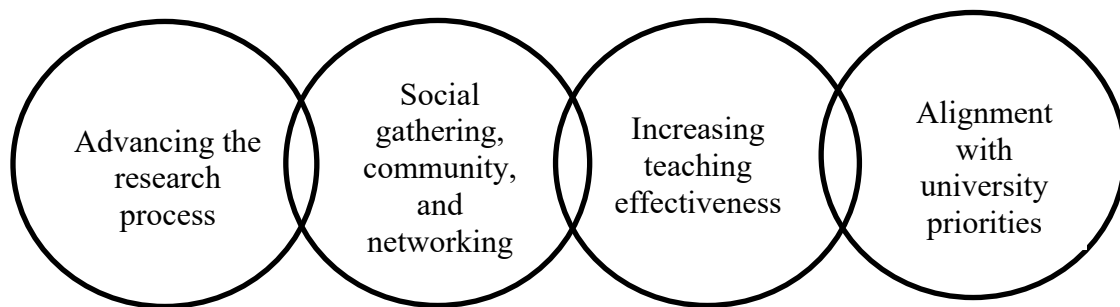
### **ETS leader output**

Advancing individual SoTL projects and enhancing scholarly productivity are core goals of the ETS Program. Across four years of the program, participants engaged in a total of 43 presentations—both internal to the university and external. These demonstrated an understanding from the ETS leader about the importance of presenting their results. Participants reported being awarded eight total (in three years) internal and external grants. Additionally, participants reported 17 publications (in three years) connected to their participation in the program. Given participants were at slightly different stages in their SoTL research processes when entering the program, it is interesting that 27 (in three years) new research projects were developed. Participants earned grants, produced publications, developed new research projects, and attended conferences (18 total in two years reporting). The programmatic goals of advancing individual research projects and enhancing scholarly productivity are evidenced in the reports. Additionally, the programmatic goals of practicing the integration of scholarship and teaching are evidenced in the publications, presentations, and grants related to teaching. Additionally, two participants (with half of the years reporting) claimed to make curricular changes and developed new courses.

### Outcomes from department and college SoTL programs

As mentioned previously, a strength of the ETS Program is that beyond helping faculty advance their own SoTL projects, ETS leaders provide SoTL-focused programs in their departments or colleges. Participants in this study from the years 2015–2019 offered 42 programs with 432 faculty attending those programs. These SoTL-focused programs were offered locally in the departments and/or colleges of the ETS leader, and were often attended by faculty who may not have attended other professional development programs. Upon analysis of the titles of these programs, the following themes emerged as relevant and interesting to the intended outcomes, the process, and the content of unit-level events: advancing the research process; social gathering, community, and networking; increasing teaching effectiveness; and alignment with university priorities (see figure 1). These themes are discussed below with example programs.

**Figure 1. Emergent themes from ETS Program SoTL programming**



#### *Advancing the research process*

Several of the programs provided guidance for faculty and graduate students to advance their research agendas or specific SoTL projects. This is directly aligned with several of the scholarship area outcomes within the Center. For example, ETS leaders introduced the idea of SoTL research through programs like, “How to Convert your Classroom Assignment into Research,” and a program helping faculty see a case study of how one of the ETS leaders advanced a small research project into a larger project entitled “Diversity Simulation: Moving from Pilot to SoTL Research Project.” Some of the ETS leaders, after discussing projects with their departments, then went on to apply for and obtain grant funding to continue and extend their projects. For example, the program “Nursing Simulation and Diversity Enhancement: SoTL in a Diversity Curriculum Development Grant” specifically addressed how the ETS leaders obtained grant funding to support their research. Other programs focused on developing a SoTL project like “Developing a SoTL Research Question and Plan” and ongoing programs like “CISE SoTL Journal Club: Developing your Research Study,” “A Collaborative Lunch: Connecting the Dots Between Scholarship, Teaching and learning,” and “Coffee, Tea and SoTL: Project Workshop and Looking Ahead to Next Year” combined research project development with community building, which emerged as another theme of the programs.

### *Social gathering, community, and networking*

In addition to the ongoing and community building nature of the programs listed above, several programs sought to explicitly develop networks of researchers and collaborative projects. For example, “Transitioning Social Networks into Academic Networks Parts 1 and 2” represented a common “series” approach to these events. This allowed attendees to create a mini faculty-community within the department or college to promote community and collaboration. Another example program was “Faculty Development Scholarship Team Formation Meeting” where those who were interested in collaborating on a research project could come together with the facilitation of the ETS leader. One such program, “Building Futures with Engaged Teaching” was offered within an existing program seeking to prepare future faculty members for life after their doctoral program. This program introduced the idea of researching teaching as a viable and valuable professional goal among faculty. Similarly, many programs utilized the buy-in for teaching effectiveness to engage with faculty.

### *Increasing teaching effectiveness*

Several of the programs discussed what it meant to be an effective teacher, implementing what is known as evidence-based or scholarly teaching in the classroom. As such, programs covered a wide variety of topics relevant to the ETS leaders’ discipline ranging from the role of the teacher, innovation, and trying new teaching techniques to increase attention to diversity. For example, “The Use of Trigger Warnings in the Classroom: How to Talk with Students about Sensitive Topics” and “Talking about Anxiety in Foreign Language Classes” introduced the topic of SoTL by first discussing a teaching problem common within the discipline. The ETS leader introduced the idea of SoTL by demonstrating how published studies could be used to solve these teaching issues and thus could lead to attendees engaging in such research. Other examples of these types of programs included, “Ethics of Self Driving Cars Workshop Planning Sessions” and “How to Use as Much Inquiry as You’re Comfortable with in Your Calculus Class,” demonstrating the ability of the ETS leaders to design thoughtful programs that were relevant to those in their disciplines while connecting them to the world of SoTL. ETS leaders also provided programs demonstrating the use of evidence-based teaching techniques such as “Making and Using Media for Flipped and Blended Classrooms” and “Investigating Student Learning Gains in a Flipped Calculus I Course” to demonstrate the progression from scholarly teaching to SoTL publication.

### *Alignment with university priorities*

Since engaging students in the classroom is part of the vision of the ETS Program’s university, many of the ETS events aligned with the university’s priorities. For example, programs entitled “Building Futures with Engaged Teaching,” “Engaging Undergraduate in Thoughtful Technology Integration in Future Classrooms Part 1 and 2,” and “Brainstorming: Engagement in English” integrated university priorities within the discipline in which the course and ETS leader taught. One method of engagement involves the use of High Impact Practices, HIPs (Kuh 2008), which are popular topics for SoTL publications and encouraged by the institution. As such, ETS leaders offered programs about implementing and studying HIPs in the classroom. One example was, “Increasing Student Retention and Engagement: A Workshop on High Impact Teaching Practices.” Following this, an entire year of the

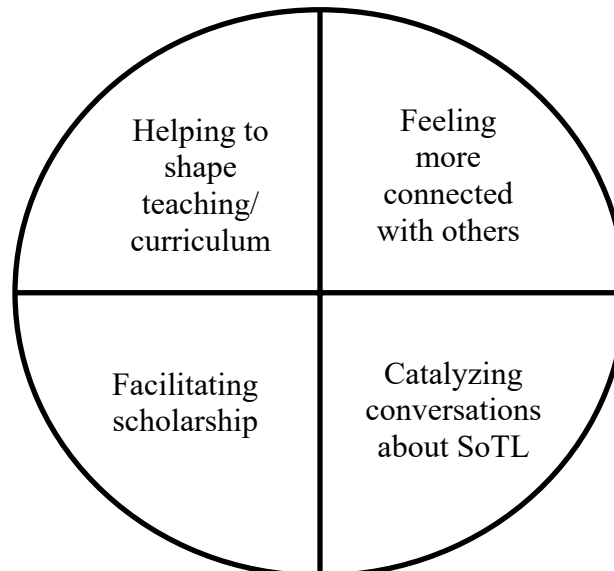


ETS Program focused on research projects related to High Impact Practices, serving as a theme to connect the ETS Leaders across campus.

### Outcomes from ETS leaders' self-reflections

In addition to reporting the individual progress and output related to SoTL research projects and outcomes from professional development events, ETS leaders engaged in self-reflection about their work over the year by responding to several open-ended questions. When examining the reports of the ETS leaders, several emergent and common themes were identified that researchers broadly organized as follows: feeling more connected with others, catalyzing conversations about SoTL, facilitating scholarship, and helping to shape teaching/curriculum (see figure 2). What follows is an exploration of those themes.

**Figure 2. Emergent themes from ETS leader reflections**



#### *Feeling more connected with others*

As mentioned in the introduction, the ETS Program aims broadly to foster a sense of belonging and to attend to strengthening relationships. Also, given that building community is one of the outcomes of the regular ETS meetings, it is not surprising that many ETS leaders noted developing connections and “building a network of SoTL colleagues” with other ETS leaders and faculty within their departments or colleges. As specifically noted by one ETS leader, “The program helped me collaborate with colleagues inside (department-wide activities) and outside (other ETS leaders) of my department.” ETS leaders often reported feeling a “sense of community” with others and developing collaborations within and across units, for example, “This program helped me immensely to feel connected and

helpful.” Additionally, when ETS leaders missed required cohort meetings, they felt less connected to the community. Various quotes from the reports validated claims that the program promotes connections with others, offers support for SoTL research, and builds community through collaboration:

*It's been great to have support (both collegial and monetary) to conduct the sort of research I am interested in. It's been very motivating and helpful to have a community to share and be accountable with.*

*I met some really amazing colleagues from other disciplines at JMU. I always value that. The importance of collaboration was strengthened for me.*

*The program has connected me to colleagues across campus I would likely not have met or been able to learn from.*

ETS leaders found value in connections across the university and within departments/colleges. These connections fostered collaboration inside and outside the departments and accountability for enacting SoTL research. These qualities were key aspects of the implementation and outcomes generated by the ETS Program. As noted earlier, Kenny, Watson, and Desmarais (2016) maintain that building SoTL networks at an institution is a necessary component for success. Given that participant comments conveyed community building as a noted benefit of the program on the evaluation report in the first year the program was offered, faculty facilitators of the program offered optional social events, in addition to cohort meetings, with the intent to build community among scholars. The community building aspects of the program, we propose, is perhaps one of the most important features to attend to in developing SoTL programs to support, sustain, and catalyze SoTL growth on campuses. Attending to the community-building aspects of faculty learning communities and intentionally fostering connections and collaborative potential are important design and facilitation considerations.

#### *Catalyzing conversations about SoTL*

A major assumption behind the design of the ETS Program is that if the Center empowers faculty to engage in SoTL conversations in their departments and colleges, those conversations might have a ripple effect and encourage ongoing dialogue about and implementation of high-quality teaching and learning practices—developing a culture of SoTL that enhances student learning and achievement, as well as faculty skill and enjoyment of teaching and learning. These, we argue, are institutional impacts of the program. That being said, one of the specific ETS Program outcomes is “catalyzing unit-level teacher-scholar conversations,” which was mentioned by many ETS leaders as a key factor in sustaining long-term impact of the program.

It is expected that ETS leaders act as SoTL champions in their unit and thus they should take a leadership role in encouraging and fostering conversations about SoTL by offering programs throughout the academic year. This particular facet of the program is a strength and appears to be rare based on published literature about SoTL faculty learning communities. In evaluation reports, faculty commented on various aspects of their SoTL leadership roles. Some reflected on their roles and ascertained that they

were simply getting SoTL conversations started in their departments; for example, one leader noted: “What the faculty see is a faculty development chair who is really promoting SoTL this year! . . . I believed that I am still laying the groundwork for SoTL within my department.” Another ETS leader mentioned that other faculty came to them to discuss projects, explaining: “Colleagues in my department and the college are openly talking with me about their SoTL projects . . . it’s creating new opportunities for consultations and extending the community of practice.” Extending communities of practice by encouraging leadership roles for faculty within diverse departments through a diffusion of innovation theory approach [support early adopters, catalyze unit conversations, encourage saturation of the conversation (Rogers 1962)] is an intentional part of the design of the ETS Program. By supporting individual leaders in an interdisciplinary community of practice and then requiring them to host SoTL events in their departments, SoTL conversations multiply on campus. One ETS leader indicated:

*This program spurred me to take more of a leadership role in developing events that could share my practices with colleagues in my department, college, and across campus. Without ETS, I probably would have worked on my ETS activities anyway but would have been less inclined to share and lead workshops on it.*

Another reported, “I have contributed to the ETS Program community by bringing faculty together in my college around engaged teaching and scholarship, and by sharing information about the ETS Program.”

In effect, ETS leaders acted as SoTL community organizers in their departments and colleges, catalyzing SoTL conversations, by taking on a leadership role, developing events, bringing faculty together, acting as a consultant, and sharing information. These outcomes are important actions that showcase how ETS leaders engaged in the program and with their colleagues; therefore, contributing to a university-wide impact on conversations and engagement with SoTL.

#### *Facilitating scholarship*

One of the program outcomes for individual ETS leaders is to advance a research project and promote scholarly productivity. Many ETS leaders mentioned that the program created space for them to complete their projects through accountability/deadlines for scholarly productivity, opening new lines of inquiry, and legitimizing SoTL scholarship as a valued line of inquiry in their department. One ETS leader noted benefits from organization and focus, stating that the “ETS [program] made me more organized and focused on scholarship. While it takes time to complete a research project, there is also personal satisfaction from doing it right.” Connections between teaching and research were also highlighted as a benefit of the program; for example, another ETS leader reflected, “Better understanding the connection between research and teaching was probably the biggest takeaway from the program. I already knew one could influence the other, but the program helped me learn more about this.” In other words, ETS leaders actively “merged the waters” between teaching and research, effectively seeing how one’s scholarly agenda can be connected and partnered with one’s teaching. Another ETS leader noted this specifically, stating, “My area of specialization and my teaching were

completely divorced. Now, with SoTL, they go hand in hand.” Additionally, scholarly skills for future work are also noted as a benefit of the program, thus planting the seed and confidence for more SoTL inquiry to take place. As confirmed by another ETS leader, “I definitely want to keep working on SoTL projects in the future. This program has given me the tools I need to accomplish this kind of project.” With this participant and others, engagement with the ETS Program and with their colleagues planted the seed to further pursue SoTL, while also developing a scholarly focus and numerous skills for SoTL research.

#### *Helping to shape teaching/curriculum*

SoTL work can create a feedback loop that reinforces course design thinking, intentional teaching, and curriculum innovations. The ETS Program intends to encourage participants to make progress toward practicing the integration of scholarship and teaching. Ideally, SoTL informs course design thinking if the results are used to “close the loop” where implications of the research inform the course design, teaching and learning activities, and curriculum content enhancement. One ETS leader noted their program helped faculty in their college understand how curriculum was situated within the broader discipline of science education. They stated:

*In respect to the departmental/college-wide seminar and workshop on active learning . . . I feel that these events have helped provide a broader perspective for my colleagues regarding science education efforts at the national, institutional, and classroom levels. The seminar was attended by an estimated 110 individuals, which included representatives from across CSM [College of Science and Math] departments, including both faculty and (undergraduate and graduate) students alike.*

Situating “active learning” as a strategic goal in the broader discipline allowed the program to align the faculty member’s curriculum with other efforts in science education. Another ETS leader indicated that their participation in the program informed their planning of specific courses in their department: “As a direct result of our college-wide event, I learned what is being done state-wide to meet new mandates for computer literacy, cyber security, and coding experience in K-12 schools. [I] will try to incorporate that into planning for technology in K-12 teacher preparation.” The ETS leaders’ programmatic design, organization, and implementation established a foundation for rethinking course objectives, curriculum design, and content integration. In support of these outcomes, several ETS leaders reported having the opportunity to pilot and assess new courses as a result of their involvement in the ETS Program, which shaped and impacted teaching and curriculum development at the departmental, college, and university levels.

## DISCUSSION AND CONSIDERATIONS FOR IMPLEMENTATION

As noted above, one of the strengths of the ETS Program is the practice of faculty developing faculty. In other words, outside experts are not necessarily brought in to “tell” faculty about how to best do SoTL. Identifying local talent and creating conditions for “situated learning” in a “community of practice” (Lave and Wenger 1991) proved effective in our case study. Though international SoTL literature is used by sharing the voice of experts, for example, sharing Elon University’s excellent SoTL video series (Elon University 2014) and Kennesaw States’ helpful website with SoTL resources

(Kennesaw State University 2020), faculty are encouraged to do what the co-founder of the ETS Program and co-author of this paper suggests, “use your disciplinary lens and research methods to study teaching.” With a “faculty empowering faculty” approach, faculty who serve as liaisons/facilitators of the program share their own struggle and growth process in SoTL to encourage others to treat the SoTL journey as a learning opportunity. This vulnerability of not knowing all the answers about how to best do SoTL research serves as a critical facet of sending the message to faculty that we are in this together and we can learn from one another and our respective disciplinary expertise. The approach of “co-learning” and “vulnerability” might be considered by others trying to create similar programs at their institutions (Brantmeier and McKenna 2020).

Much of the literature on advancing SoTL showcases educational development efforts that develop a set of faculty who do SoTL work. In the James Madison University ETS Program, faculty are provided individual development, yet also share their knowledge and expertise by providing events in their departments, colleges, and across campus. From a programmatic design perspective, this community of practice approach, where ETS leaders share their emergent expertise of SoTL with others in their units, fosters conversation and may lead to “joint enterprise” (Lave and Wenger 1991) where colleagues in departments begin exploring SoTL as a viable and rewarding research path. In this respect, the ETS Program intends to diffuse SoTL innovations (Rogers 1962) by supporting early adopters who help spread conversations about SoTL at the unit level. If institutions intend to advance SoTL conversations and embrace it as a valid and important form of scholarship, then this community of practice and diffusion of innovation approach might be adopted by others when supporting SoTL leaders toward institutional SoTL cultural change (Hutchings, Huber, and Ciccone 2011). Such efforts can advance SoTL conversations, potentially catalyzing nested SoTL communities, fostering reconsiderations of promotion and tenure reward structure criteria, advocating for more inclusive definitions of scholarship, and infusing high quality, learning-centered design.

Table 1 represents possible impacts of the program across various levels, starting with individual faculty work and moving through institutional level potentials. Though the ETS Program outlined in this case study did not achieve all the indicators of success in the table, it did demonstrate an immediate positive impact on the faculty in the program by supporting their research projects. Given the advancement of projects through IRB approvals, conference presentations, grants and publication, it is clear this program, like others, positively impacted the scholarly productivity of the ETS leaders. However, the ETS Program supports individual inquiry into SoTL, while simultaneously attempting to catalyze department and college-wide conversations around SoTL. The intention is to advocate for more inclusive understandings of scholarship, inclusive rewards systems, and better-quality teaching at our specific university and in higher education more broadly. The authors are currently conducting an analysis of the ways in which SoTL is valued at the institution to better understand this particular impact.

**Table 1. Possible indicators of impact and success for this type of program**

Level of impact	Indicators of success
Faculty	SoTL publications Course innovations Enhancement of student learning Course-level assessment innovations Preliminary data for grant submissions
Department	SoTL champion in the department Department-wide workshops Curricular innovations Assessment innovations Program-level continuous improvements Indirect funds coming to the department from SoTL awards National/international visibility of discipline-specific scholarship Tenure and promotion/annual evaluations recognize SoTL work
College	Cross-department collaborations (teaching and SoTL) College-wide workshops and initiatives Indirect funds coming to the college from SoTL awards National/international visibility of SoTL scholarship
Institutional	Cross-college collaborations (teaching and SoTL) University-wide workshops and initiatives Indirect funds coming to the university from SoTL awards National/international visibility of scholarly products

In addition to the number of programs offered and diversity of participants in the professional development events, ETS leaders reflected upon the ways in which their programs helped to initiate conversations about SoTL and lay the groundwork for legitimizing and appreciating diverse forms of scholarship. Additionally, and at the institutional level, the potential of such a program includes transdisciplinary collaborations across the university, indirect funds garnered from external grants, and national/international visibility for the institution, which helps in times of economic struggle for institutions around the world. In an ideal form, other programs modeled after the ETS Program might help to engage institutions of higher education to tackle some of the most pressing and wicked problems of our time, such as pandemic diseases, poverty, climate change, racial, class, and gender inequality, and many more perennial problems that threaten human societies and continued inhabitation of this planet.

**Staffing model, planning, and logistics**

There were various aspects of the program that remained consistent across the four years discussed in this paper, for example, the faculty learning outcomes for the program and oversight by the same staff member at the center (the assistant director of the scholarship area). However, in the four

years of reports examined in this study, there were four different faculty liaisons who facilitated the program, three of whom are co-authors of this paper. As a result, several aspects of the program were revisited and revised annually in an effort to learn from the past and also to tap into the existing expertise of the faculty liaisons assessment expertise. For example, the meeting agendas and evaluation report templates used were revisited and revised annually. Some program liaisons created social events for the ETS leaders outside of the required meetings, while others implemented a theme for the year (e.g., High Impact Practices). Others developed additional documentation and resources to help the ETS leaders streamline their work. For example, one of the liaisons had a background in health promotion and developed a program planning checklist to ensure the ETS leaders knew how to plan, implement, and evaluate their unit events effectively. This included paying more attention to marketing the events to relevant stakeholders. A needs assessment was developed that asked the ETS leaders to describe their individual needs prior to starting the program. This permitted the ETS liaison to tailor the professional development more closely to the individual needs of the ETS leaders. Keeping consistent records proved challenging with leadership transitions as well as within a mindset of continual growth.

The original program required ETS leaders to plan and implement two unit events per semester and one university-wide event as a group. This wider event typically coincided with a center-sponsored symposium for all faculty in May. However, the ETS leaders struggled to develop four unique programs and complete all the necessary paperwork while continuing to make progress on their research projects. Oftentimes the events would be the same theme but have multiple parts. We shifted the program mid-way to reduce the number of unit events to one per semester with a focus on higher attendance at the events. While the overall number of events and participants were reduced, based on the evaluation reports, the program impact stayed relatively consistent. We noted that some units embedded ongoing SoTL discussions after the events took place, indicating it had become part of the fabric of the unit rather than a one-time or ongoing “program” organized by the ETS leaders. This type of organizational change within units was a particular success of the program.

### **Lessons learned**

One of the challenges of having so many ETS leaders implementing professional development programs is keeping track of what everyone in the program is doing. The program utilizes a modified planning document where ETS leaders propose their programs and submit to the ETS Program liaison for feedback. This “blueprint” planning document explains the format of the event (e.g., workshop, roundtable), the title and description, intended outcomes, and includes a plan for marketing to increase attendance. Additionally, a roster template is used by ETS leaders to track program participation. This creates much paperwork and tracking for both the leaders and liaison when there are 2–4 events and 6–8 ETS leaders each year. It is imperative that the program liaison develop a strategy for tracking the work of the ETS leaders with regular follow-ups and reminders. As can be seen by the outcomes above, tracking such details was a challenge. However, several aspects of the program remained consistent, allowing us to maintain some level of record keeping. For example, we use a somewhat standard report template that allows for changes in leadership while not impacting the ability to track outcomes.

Early on, the program used an overlapping cohort model where new ETS leaders were identified and started in the spring semester of the academic year. The goal was to have returning ETS leaders act as mentors to the newer ETS leaders, partnering with them through program planning and

implementation. This posed challenges to resource allocation and sense of community. Later, this was shifted to allowing ETS leaders to apply to return for an entire academic year. This allowed the ETS leaders to work together for an entire year and for 1–2 leaders to return for a subsequent year. This shift encouraged sustained, longer term engagement in the community of practice.

It's important to recognize that recruitment into the program and garnering attendance at unit- and university-wide events was not without challenges. For example, faculty members would attend an ETS leader event in their unit and this prompted them to apply to the program in a subsequent year. In this way, we saw referrals from within departments so each year there were new ETS leaders from similar departments. Additional effort was needed to invite faculty across a wide variety of disciplines to apply each year. Program liaisons might reach out to under-represented units to ask which faculty are involved in SoTL and then follow up with individualized invitations to apply to the program. Occasionally, 1–3 ETS leaders applied and were selected from the same unit or within similar disciplines within a college. We noted these ETS leaders worked together within their departments/colleges to plan and implement programs. These events tended to be more successful in terms of attendance and impact as multiple leaders worked to develop and market the events. There were other times when increasing attendance at unit and university events required strategic marketing using the existing networks of the ETS leaders, the community of ETS leaders from the program, and asking campus partners to help advertise the events.

A particularly interesting question emerged when examining the data in the research process. Most ETS leaders were assistant professors and women. The research team speculates that perhaps teaching and the study of teaching has a gender socialization component to it. Why are more men not applying for the program? Perhaps pervasive, enculturated, and socialized views of “educational development as pink collar labor” (Bernhagen and Gravett 2017) and teaching in general as feminine or a woman’s occupation might factor into who finds value in the systematic, rigorous study of SoTL, and also the educational development work involved in this specific SoTL-focused ETS Program.

There were a few challenges also related to resources. The program provided each ETS leader with \$1,000 in professional development by transferring the funds directly to their department for expenditure. Faculty worked with their department to expend the funds appropriately, however, we received reports from some ETS leaders that resources were not consistently used. In these situations, the departments retained the funds for their own purposes and prompted us to question whether the funds were necessary, should be reduced, or could be applied for by the ETS leaders if they needed them. The funds were typically used to fund conference travel, purchase research equipment or wages for student workers, and for resources and food for the unit events. If funding is provided, it’s helpful for ETS leaders to have a list of possible expenditures to help them utilize the funds for their benefit. For example, a list of conferences, books, writing accountability groups, and other resources that would benefit them or their departments allow the ETS leaders to find ways to effectively expend resources. Perhaps leaders can learn to do better than we did through reading the above discussion of the staffing model, program planning, and logistical considerations of launching and maintaining such a program.

## IMPLICATIONS: TOWARD INSTITUTIONALIZING SOTL CULTURE

The unique contributions of the ETS Program, in the minds of the authors, lies within the faculty empowering faculty ethos of the Center for Faculty Innovation and the program itself, embedded



within the language and practice of faculty members in their departments and colleges. It also lies in the potential for institutional cultural change, indicated by a value of evidence-demonstrating, high-impact teaching and learning indicated by everyday conversations, programs, financial incentives, and policies that support this work. While our analysis of the self-reflection reports for the ETS leaders and liaisons provides insight into the immediate outputs and outcomes of the program, the long-term impact on the institution requires a different set of questions. One measure of the institutional impact of the program is that it started as an externally funded program that demonstrated promise and subsequently was embedded in the ongoing operational budget of the Center. One consideration for understanding how to promote SoTL cultural change is to examine the literature on “critical mass,” “tipping points in social convention,” (Centola et al. 2018) and figure out what sort of per capita numbers of SoTL scholars are needed to promote the institutional and cultural change we ultimately hope to achieve by continuing to implement this program. Additionally, the authors of this article recognize deeper interrogation is needed into the dynamics of cultural change in universities and embrace our future learning regarding networked approaches that promote long term engagement with multi-layered and integrated initiatives (Roxå, Mårtensson, and Alveteg 2011). Again, this article is a case study, aimed at a longer, sustainable journey of change. For example, the authors are currently in the process of examining the tenure and promotion guidelines across the university looking for recognition of SoTL scholarship as a relevant and rewarded line of inquiry.

Faculty members who sit in positions of power during annual review, promotion, and tenure processes may devalue SoTL and a new generation of scholarly work that advocates for it. Clearly, the work toward institutionalizing SoTL cultural change will involve deconstructing power, privilege, and oppression. For example, who serves as gatekeepers in annual performance reviews? Do they value SoTL scholarship equally related to other forms of scholarship in their disciplines, or is SoTL considered a lesser form of scholarship in comparison to “real” disciplinary scholarship? If SoTL is not valued as much, and if women are disproportionately doing SoTL work, how does that, long term, reproduce gendered inequalities and inequities in higher education? Importantly, gendered participation and participation by early career faculty may create barriers to institutionalizing SoTL culture. Future inquiry could involve demonstrating long-term change and validating indicators of success (or barriers) through studying how the program influences the career trajectories of individual (mostly female and early career) faculty members, research agendas in departments and colleges, and perhaps even the mission, vision, and strategic plan of the university in question.

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