

The Past, Present, and Future of Scholarship of Teaching and Learning in Psychology

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We report data from a national survey of faculty ($N = 482$) that examined scholarship of teaching and learning (SoTL) research across 7 dimensions of productivity, comparing current perceptions of SoTL with those of a previous study published 10 years ago, and differences across disciplines, institutions, and gender. Psychology faculty had more positive perceptions of SoTL in general than nonpsychology faculty and perceived more departmental support for SoTL work than they did in the past. Psychology faculty, relative to nonpsychology faculty, also believed that their departmental colleagues were more supportive of SoTL efforts and that their departments supported such work. However, we found that perceptions varied across institutions, with faculty at baccalaureate institutions having more positive perceptions of SoTL than faculty at community colleges and doctoral granting institutions. Although there were similarities in SoTL support across years and faculty type, there was a positive trend in perceptions of support over time. We found only 1 significant gender difference: Men reported higher engagement with SoTL than women. Overall, we conclude that SoTL is evolving into an accepted form of scholarship; however, this form of scholarship may currently be more accepted and valued in psychology than in other disciplines.

Keywords: scholarship of teaching and learning/SoTL, pedagogy, higher education, changing perceptions over time

Multiple constituencies are questioning the value of higher education. Nearly 9 years ago, [Arum and Roksa \(2010\)](#) suggested students were not learning much in college. More recently, [Ber-](#)

[linerblau \(2017\)](#) suggested that faculty do not care as much about teaching as they do about research. Demonstrating effective teaching is one way to showcase the value of higher education and quell

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concerns about its value outside of the academic arena (Trigwell, 2013). Specifically, a sharper focus on the scholarship of teaching and learning (SoTL) in particular may be one means to strengthen the perceived value of higher education to the public and policymakers (Hutchings, Huber, & Ciccone, 2011). We summarize the history of SoTL and build on a previous national study of the state of SoTL in psychology (Gurung, Ansborg, Alexander, Lawrence, & Johnson, 2008) to provide a contemporary view of how SoTL is practiced and supported across academic disciplines. Specifically, we examine faculty engagement in SoTL, how faculty perceptions of SoTL vary across academic fields, how SoTL perceptions have changed, and if there are institutional and gender differences in perceptions of SoTL.

The Rise of SoTL

A focus on the theoretical underpinnings of how people learn, the intentional, systematic, modifications of pedagogy, and assessments of resulting changes in learning, collectively define SoTL (Gurung & Landrum, 2015), which has now grown beyond a fringe practice in higher education. Catapulted to the national stage with the work of Boyer (1990), SoTL is a valid, effective practice benefiting students, faculty, and institutions (Hutchings et al., 2011; Trigwell, 2013). SoTL is also an important means to add value to higher education (Kreber, 2013) by creating a new model for classroom teaching. SoTL researchers illustrate that teaching is more than the transmission and delivery of knowledge, instead making the classroom a “place for the development of knowledge and meaning-making” (Parker, 2013, p. 23). A large number of faculty collect information about the effectiveness of their teaching beyond course evaluations (Hutchings et al., 2011; Richmond, Boysen, & Gurung, 2016). However, there are no national statistics on the practice of SoTL, specifically.

SoTL is currently practiced across academic disciplines (Hake, 2015; McKinney, Atkinson, & Flockhart, 2017) at research and teaching institutions alike (Bernstein, 2013). Ideally, it is used to drive curricular practice and reform (Dickson & Trembl, 2013; Hubball, Pearson, & Clarck, 2013). The practice of SoTL offers a model of teacher development and opportunities for continuous improvement, giving faculty a more systematic and informed way to think about their work as teach-

ers and students’ work as learners (Chick & Poole, 2013). Given the historical significance of SoTL and the growing use of SoTL, it is important to understand how practitioners and researchers across disciplines perceive its utility and value.

Contemporary Issues in SoTL

There are different facets/components to SoTL, and these different facets motivated us to design and execute the current study. The first major issue involves who can conduct SoTL research. By definition, SoTL is any research on teaching and learning. Any scientist or academic investigating issues relating to teaching and learning is also doing SoTL but there is no consensus on this issue. Educational and cognitive psychologists are clear candidates for being SoTL practitioners, given the obvious connection these areas have to learning. Instructors from many disciplinary backgrounds conduct research on their own classes, perhaps a distinguishing feature of SoTL. This is important as some faculty may not feel qualified to conduct and publish formal SoTL research. Nearly every discipline has practitioners of SoTL (often referred to as Disciplinary Based Educational Research or DBER); however, few of these individuals may be formally trained to do such work. Thus, the current national study aims to provide an up-to-date and accurate picture of who is doing SoTL.

A second major issue is the debate over methodological rigor. The momentum of the SoTL movement is somewhat thwarted by an internal turf battle over which discipline’s methodology should take center stage (Chick, 2014). Some of the discussion in SoTL presentations and publications seems to imply that quantitative methodologies and the scientific method are the keys to producing quality SoTL work (Maurer, 2011). Addressing pressures by some SoTL researchers to use the scientific method, Grauerholz and Main (2013) discussed how the scientific method is not appropriate in every classroom context. Poole (2013) took this discussion a step further to unpack what is (and what should be) meant by SoTL research. Benchmarks for SoTL in psychology are empirically based (Wilson-Doenges & Gurung, 2013), whereas a universal set of good practices for SoTL need not be empirically based (Felten, 2013; Glassick, Huber, & Maeroft, 1997). Correspondingly, Gurung (2014) encouraged the

use of mixed-methods research. Our national study of faculty from diverse disciplines with an oversampling of psychologists (who receive extensive methodological training en route to doctoral degrees), will help uncover if additional methodological training predicts whether or not psychologists are more likely to conduct SoTL.

SoTL: Contributions From Psychology

The field of psychology has been a major contributor to SoTL (Shulman, 2015 cited in Gurung & Landrum, 2015) both directly, with the use of psychological concepts such as self-efficacy in the study of learning (e.g., Komaraju & Dial, 2014), and indirectly, with the use of results and methodologies of cognitive, social, experimental, developmental, and educational psychology (Mashek & Hammer, 2011). Perhaps not surprisingly, many of the most visible individuals in the wider SoTL community are psychologists (e.g., Daniel Bernstein, Past President of the International Society for Scholarship of Teaching and Learning, ISSOTL; Gary Poole, Co-Editor of *Teaching and Learning Inquiry*). Psychology has also actively contributed to building on Boyer's (1990) reconceptualization of SoTL. Halpern et al.'s (1998) "paradigm for the twenty-first century" (p. 1292) defined scholarship to include both "scholarship of pedagogy" and "scholarship of teaching" in addition to "original research," "integration of knowledge," and "application of knowledge." In response to this work, the American Psychological Association (APA)'s Division 2, the Society for the Teaching of Psychology, created multiple task forces charged with advancing SoTL in psychology. In 2008, members of one task force reported on the state of SoTL in psychology in a special issue of the *Teaching of Psychology* (Gurung et al., 2008).

In the first published study of SoTL in psychology, Gurung, Ansbarg, Alexander, Lawrence, and Johnson (2008) surveyed 142 teachers of psychology, modifying a survey used by Cox, Huber and Hutchings (cited in Huber & Hutchings, 2005). Gurung et al. (2008) assessed the level of support faculty perceived in their departments and at their institutions, as well as the role of SoTL in personnel decisions and obstacles to conducting SoTL. In general, "survey respondents failed to report a prevailing sentiment of support" (p. 257). Gurung et al.

(2008) found that participants reported low levels of institutional support and claimed more support was needed to promote SoTL. Similarly, Buch (2008) conducted a small-scale study in one psychology department to assess perceptions of SoTL. Consistent with Gurung et al. (2008) findings, Buch (2008) found that, at the departmental level, the value and perception of SoTL was much lower than other areas of discipline specific research.

Advancing the research of Gurung et al. (2008), other researchers focused on discipline specific perceptions of SoTL in family studies (e.g., DiGregorio, Maurer, & Pattanaik, 2016; Reinke, Muraco, & Maurer, 2016), dental education (Lanning et al., 2014), health sciences (e.g., Burns, Merchant, & Appelt, 2013), and across academic disciplines but with specific populations (e.g., early career faculty; Matthews, Lodge, & Bosanquet, 2014; within one institution, Secret, Leisey, Lanning, Polich, & Schaub, 2012). In general, these researchers found that individual faculty valued SoTL, but that at the institutional level, there was mixed support. For example, Buch (2008) reported that the majority of faculty members report that departments "should" count SoTL for merit, but that the majority of faculty members surveyed indicated that their departments did not. Other researchers reported that departmental and institutional support for SoTL is high. For example, specific to the family studies discipline, Reinke, Muraco, and Maurer (2016) found that at the departmental level more than 66% supported and encouraged SoTL involvement, and at the institutional level 64% of respondents indicate it is supported and encouraged. These researchers provide some insight into the potential national perception of SoTL; however, the studies are either discipline specific or population specific.

The Present Study

Our study portrays a detailed picture of five major areas of interest: faculty engagement in SoTL, perceptions of departmental support and institutional support of SoTL, perceived obstacles to conducting SoTL, and the role that SoTL has in personnel decisions (e.g., hiring, promotion, tenure, etc.). We examine each of these areas of interest in the context of four major research questions.

What Is the Current State of SoTL Engagement?

We wanted to understand the current state of affairs in SoTL, so first we examined our 2017 sample which included both psychology and non-psychology faculty. As researchers have focused either on discipline specific perceptions of SoTL (e.g., Buch, 2008; Burns et al., 2013; DiGregorio et al., 2016; Gurung et al., 2008; Reinke et al., 2016) or within special populations across academic disciplines (Matthews et al., 2014; Secret et al., 2012), our first aim was to determine what the current state of SoTL was across diverse academic disciplines and how activities that promote SoTL are evaluated within different settings. As such, we assessed SoTL practices and perceptions among faculty nationwide across diverse academic disciplines, institution type, teaching experience, and academic rank.

How Do Psychology and Nonpsychology Faculty Member Perceptions of SoTL Vary?

As previous researchers focused on psychology and SoTL (Gurung et al., 2008) or other fields and SoTL (Smeyers & Smith, 2014), our second aim was to understand how these SoTL activities and perceptions of SoTL differed between psychology and other academic fields. Specifically, we wanted to investigate whether psychology versus nonpsychology faculty had different views of SoTL.

How Have Perceptions of SoTL Changed Over Time?

Third, as the field of SoTL is relatively new (in the context of research as a whole), we wanted to assess how evaluations and perceptions of SoTL have changed over the past decade by directly comparing the current data to those collected by Gurung et al. (2008). In other words, we wanted to understand the longitudinal growth or regression of SoTL perceptions between the 2008 psychology sample and the 2017 sample.

How Do Perceptions of SoTL Vary Across Institutions and Gender?

Fourth, there are some researchers who suggest that there are institutional differences (Buch,

2008) and gender differences (Cama, Jorge, & Pena, 2016; O'Meara, Kuvaeva, Nyunt, Waugaman, & Jackson, 2017) in the focus and demand of academic research and expectations. To date no researchers have investigated these demographic factors with regard to SoTL; thus, we wanted to investigate how these factors may change beliefs about SoTL. We conducted exploratory analyses on the demographic factors of institution type (e.g., community college vs. master's granting institutions) and gender to determine if there were differences in the activity and perceptions of SoTL.

We hypothesized that psychologists are more likely to conduct SoTL. We also hypothesized that given a greater focus on assessment and learning in higher education as compared with previous decades (Chew et al., 2018), perceptions of support for SoTL within departments and institutions will be more positive than reported previously (Buch, 2008; Gurung et al., 2008).

Method

Participants

Our goal was to gather data from faculty in full-time tenure and nontenure track positions, part-time (e.g., affiliate or adjunct), from all levels of their career (e.g., assistant, associate, and/or full professors), all types of colleges and universities (e.g., community colleges to large public research focused universities), and all types of academic disciplines. We solicited participation via several methods. We sent electronic invitations to several academic listservs, posted the invitation on social media (e.g., Facebook), specifically targeting academic groups, regional and national academic conferences. This effort resulted in 366 faculty across the United States and Canada who volunteered to participate in our study for the 2017 sample. However, upon analyzing the data, three participants from the psychology sample and 23 participants from the nonpsychology faculty sample failed to complete more than 10% of the survey. Therefore, 26 participants were excluded from all subsequent analyses. Additionally, we used the data from the Gurung et al. (2008) study as a longitudinal comparison group ($n = 142$). We sampled faculty across the United States and abroad ($N = 482$). We have three subsamples: psychology faculty from 2008 ($n = 142$), psychol-

ogy faculty from 2017 ($n = 180$), and nonpsychology faculty from 2017 ($n = 160$). It is important to note that we aimed to recruit any faculty possible, in contrast to previous researchers (see Appendix in Huber & Hutchings, 2005).

As illustrated in Table 1, the majority of our sample was female, full or associate professors, and who taught at a master's or doctorate granting public university. The average age of faculty for the 2017 sample was 45.35 years old ($SD = 11.07$), which was similar to the average age of the faculty in the 2008 sample ($M = 44.67$, $SD = 10.58$). Both samples were similar in the number of years of teaching experience: 2017 sample ($M = 16.55$, $SD = 10.37$) and the 2008 sample ($M = 15.12$, $SD = 9.37$).

Our sample consisted of faculty from 21 distinct academic disciplines. To get a sense of how faculty views of SoTL changed over time, we oversampled psychology faculty, given our

main point of comparison was a study conducted exclusively on psychologists (Gurung et al., 2008). Specifically, in order of frequency, our sample consisted of 180 faculty (50%) in psychology; 28 (7.7%) in education; 23 (6.3%) claiming other; 13 (3.6%) in English; 11 (3.0%) in biology; 10 (2.7%) in business/finance; nine (2.5%) in communication; eight (2.2%) in chemistry; six (1.6%) in physics; four (1.1%) in political science and nursing, respectively; three (0.8%) in sociology and economics, respectively; two (0.5%) in geography, engineering, computer science, respectively; and one (0.3%) in history, mathematics, arts, and medicine, respectively.

Compared with the 2008 sample, our 2017 sample included more faculty at higher academic ranks (i.e., more full and associate professors vs. adjunct faculty), and a greater percentage were from public institutions. Comparing distributions of age, gender, type of institution, academic discipline, gender, academic rank, and employment status across higher education, our 2017 sample appears more representative of faculty in higher education than was the 2008 sample (National Center for Education Statistics, 2018) based on a simple, nonstatistical, direct comparison of available descriptive information.

As we are conducting analyses between the 2008 and 2017 psychology faculty samples, it is important to determine if these samples were similar. As such, we conducted two chi-square for independence analyses on gender and institutional type between the two samples. The results are that there is a significant difference in gender distribution between the two samples, ($df = 1$, $\chi^2 = 8.97$, $p = .003$), but not in institutional type. Specifically, there were 13% fewer men than expected in the 2017 sample. We also conducted two independent t tests on participants age and years teaching. There were no differences in the average age or years of teaching between the two samples ($ps > .05$). Thus, we concluded that our two psychology samples were relatively similar.

Measures¹

As the main purpose of this study was to compare how SoTL is perceived at different points in time and across academic disciplines

Table 1
Frequency Data for Demographic Variables of Both Samples

Variable	2008 sample	2017 sample
	($n = 142^*$)	($n = 340^*$)
	f (%)	f (%)
Gender		
Female	74 (52.1)	214 (58.5)
Male	66 (46.5)	96 (26.2)
Choose not to identify	2 (1.4)	4 (1.1)
Academic rank		
Full professor	5 (3.5)	99 (27.0)
Associate professor	1 (.7)	91 (44.9)
Assistant professor	44 (31)	86 (23.5)
Adjunct/affiliate professor	53 (37.3)	16 (4.4)
Lecturer	0 (0)	9 (2.5)
Full-time nontenure	0 (0)	6 (1.6)
Visiting professor	29 (20.4)	4 (1.1)
Other	0 (0)	4 (1.1)
Professor emeritus	9 (6.3)	3 (.8)
Classification of institution		
Master's college/university	49 (34.5)	123 (33.6)
Baccalaureate college	44 (31.0)	94 (25.7)
Doctorate granting university	35 (24.6)	73 (19.9)
Community college	7 (4.9)	24 (6.6)
Classified as other	7 (4.9)	2 (.5)
Type of institution		
Public	70 (49.3)	236 (64.5)
Private	72 (50.7)	79 (21.6)

Note. f = frequency. (*) On several of the variables participants choose not to answer the question.

¹ To advance the transparency of open science, all materials and data are available online.

at the current time, we developed our measures based on the works of Huber and Hutchings (2005) and Gurung et al. (2008). First, we measured the type and amount of SoTL work faculty are conducting. We then replicated the measures from the Gurung et al. (2008) study. Namely, we assessed faculty perceptions of (a) departmental support for SoTL, (b) institutional support for SoTL, (c) perceived obstacles of engaging in SoTL, and (d) the role SoTL may play in personnel decisions. In addition, we created new measures of engagement in SoTL. For a full list of the questions and outcomes, see the accompanying tables.

We must note that unlike many scales used in psychological science that are designed and tested to have high internal reliability, the set of items used in this paper were not constructed by the authors, nor were they constructed and subjected to tests for validity and reliability (e.g., convergent, divergent, criterion, etc.).

Assessing engagement in SoTL. To examine our first area of interest and add to the literature on the state of SoTL, we extended Gurung et al.'s (2008) work and included several additional questions to assess participants' own engagement in SoTL activities, and participants' estimates of their departmental and institutional colleagues' engagement in SoTL (see Table 2). To assess engagement in SoTL activities, we asked seven ratio scale questions. For example, "Indicate the total amount of SoTL

books you have completed" or "How many years have you been engaged in SoTL research?"

We were also interested in faculty estimations of the percentage of departmental and institutional colleagues that were actively involved in SoTL. Therefore, we asked participants, on a sliding percentage scale of 0–100, to estimate the percentage of departmental colleagues and institutional colleagues that were "actively involved in SoTL." The correlation between the two questions was high, $r = .72$, $p < .01$.

Assessing perceptions of SoTL. We measured perceptions of SoTL in four additional areas of interest: departmental and institutional support, perceived obstacles, and the role of SoTL in personnel decisions.

Department support. To measure faculty perceptions of how their respective departments supported SoTL, we asked 14 questions on a 1 (*strongly disagree*) to 4 (*strongly agree*) forced-choice Likert-type scale (see Table 3). Therefore, the higher the score, the more positive the faculty perceived their department as supporting SoTL. Questions consisted of items such as "Over the past 5 years, my department has broadened the criteria for assessing teaching performance to fully reflect the principles of SoTL" to items that focused more on "The criteria for tenure decisions in my department

Table 2
Descriptive Data for the Amount and Type SoTL Engagement for the 2017 Sample

Type of SoTL engagement	2017		2017
	Total	2017 Psych	Nonpsych
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
The percentage of your departmental colleagues that are actively involved in SoTL	33.14 (24.83)	32.96 (24.44)	33.34 (24.44)
The percentage of your institutional colleagues that are actively involved in SoTL	25.39 (19.00)	24.70 (18.15)	26.23 (20.01)
How many years have you been engaged in SoTL research?	10.29 (8.81)	9.37 (7.92)	11.52 (9.80)
Number of peer-reviewed SoTL journal articles	3.22 (9.57)	2.98 (7.59)	3.55 (11.54)
Number of SoTL non peer-reviewed articles	1.52 (6.63)	1.11 (3.67)	2.03 (8.97)
Number of SoTL book chapters	1.40 (4.43)	1.64 (4.32)	1.15 (4.59)
Number of SoTL books	.48 (3.02)	.43 (3.12)	.55 (2.96)
Number of SoTL conference presentations/workshops/symposia	9.2 (14.59)	9.04 (13.30)	9.38 (16.09)
Number of SoTL nonconference presentations/workshops/symposia	4.99 (18.59)	3.34 (7.69)	6.97 (26.01)
Number of SoTL related grants	1.16 (2.52)	.96 (1.88)	1.42 (3.11)

Note. The 2008 sample were not asked these questions. (*M*) = mean; (*SD*) = standard deviation. Bold items represent statistically significant differences between psychology and nonpsychology faculty.

Table 3

A Comparison of Responses to Items Referring to Departmental Support of SoTL Among the Three Samples

Statements	2008	2017	2017	2017
	Psych	Psych	Nonpsych	Total
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Over the past 5 years, my department has broadened the criteria for assessing teaching performance to more fully reflect the principles of SoTL.	2.46 (.82)	2.42 (.81)	2.47 (.90)	2.45 (.85)
My department's policies encourage faculty to reflect on their teaching practices.	3.01 (.79)	3.18 (.71)	2.88 (.92)	3.03 (.82)
In my department, other faculty members are actively involved in SoTL.	2.60 (.84)	2.81 (.90)	2.73 (.91)	2.77 (.90)
My department offers adequate release time to faculty who engage in SoTL.	1.68 (.77)	1.73 (.79)	1.89 (.82)	1.81 (.81)
My department provides adequate financial support for faculty to engage in SoTL.	1.93 (.86)	2.03 (.87)	2.08 (.82)	2.06 (.84)
Departmental norms encourage participation in SoTL.	2.56 (.85)	2.74 (.89)	2.51 (.87)	2.63 (.89)
Some of my department colleagues find my work in SoTL problematic.	2.14 (.89)	1.80 (.72)	2.14 (.84)	1.96 (.79)
Faculty members in other departments at my institution are actively involved in SoTL.	2.87 (.79)	2.93 (.76)	3.08 (.78)	3.00 (.77)
The criteria for tenure decisions in my department reflect the principles of SoTL.	2.55 (.82)	2.65 (.90)	2.60 (.79)	2.62 (.84)
The criteria for promotion decisions in my department reflect the principles of SoTL.	2.56 (.82)	2.64 (.88)	2.59 (.80)	2.62 (.85)
Faculty members in my department have received tenure based at least in part on SoTL.	2.63 (.83)	2.63 (.93)	2.57 (.87)	2.60 (.90)
Other departments provide more support for SoTL than my department does.	2.29 (.69)	2.09 (.72)	2.41 (.70)	2.24 (.73)
When hiring new faculty, my department regards applicants' interest in SoTL favorably.	2.71 (.71)	2.91 (.72)	2.65 (.75)	2.78 (.74)
My department chair has actively encouraged involvement in SoTL.	2.69 (.93)	2.80 (.96)	2.58 (.97)	2.70 (.97)

Note. 1 = *strongly disagree* to 4 = *strongly agree*. (*M*) = mean; (*SD*) = standard deviation. Bold items for the 2008 data column represents differences between psychology faculty perceptions over time. Bold items for the 2017 data columns represent statistically significant differences between psychology and nonpsychology faculty.

reflect the principles of SoTL." Reliability of these questions was $\alpha = .83$.

Institutional support. To assess faculty perceptions of how their institution supported SoTL, we presented 12 items on a forced-choice Likert-type scale with anchors of 1 (*strongly disagree*) to 4 (*strongly agree*). Again, the greater the score, the more positive the faculty perceived their institution as supporting SoTL (see Table 5). Questions ranged from "Top-level academic leaders at my institution have taken significant steps to support SoTL" to "Faculty members at my institution have received tenure based at least in part on SoTL." Reliability of these questions was $\alpha = .91$.

Perceived obstacles. To assess the perceived obstacles to faculty involvement at their

respective institution, we asked participants four Likert-type questions on a 1 (*strongly disagree*) to 4 (*strongly agree*), forced-choice scale (see Table 7). Higher scores indicated greater obstacles to faculty involvement of SoTL. This measure had low to marginal reliability ($\alpha = .64$).

Role in personnel decisions. To assess faculty perceptions of the role SoTL has in personnel decisions, we asked five categorical questions about their department's most recent hiring decision, tenure decision, promotion decision, merit pay decision, and posttenure review decisions (see Table 8). Participants chose among these options: (a) no evidence of activity in SoTL submitted, (b) unsure of role played, (c) weakened the case, (d) had no impact on

Table 4
A Comparison of Responses to Items Referring to Departmental Support of SoTL Among Institutional Type

Statements	Community college	Bachelors	Masters	Doctorate
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Over the past 5 years, my department has broadened the criteria for assessing teaching performance to more fully reflect the principles of SoTL.	2.29 (.90)	2.54 (.82)	2.47 (.86)	2.38 (.77)
My department's policies encourage faculty to reflect on their teaching practices.	2.87 (.72)	3.21 (.77)	3.06 (.86)	2.84 (.75)
In my department, other faculty members are actively involved in SoTL.	2.35 (.95)	2.71 (.93)	2.89 (.86)	2.63 (.80)
My department offers adequate release time to faculty who engage in SoTL.	1.42 (.72)	1.76 (.80)	1.83 (.82)	1.83 (.76)
My department provides adequate financial support for faculty to engage in SoTL.	1.52 (.72)	2.12 (.85)	2.09 (.87)	1.91 (.79)
Departmental norms encourage participation in SoTL.	2.25 (.93)	2.73 (.88)	2.70 (.84)	2.43 (.84)
Some of my department colleagues find my work in SoTL problematic.	2.32 (.83)	1.94 (.87)	1.92 (.75)	2.16 (.83)
Faculty members in other departments at my institution are actively involved in SoTL.	2.61 (.55)	3.01 (.71)	3.06 (.80)	2.96 (.71)
The criteria for tenure decisions in my department reflect the principles of SoTL.	2.05 (.88)	2.72 (.82)	2.76 (.77)	2.36 (.80)
The criteria for promotion decisions in my department reflect the principles of SoTL.	1.89 (.77)	2.72 (.83)	2.74 (.79)	2.43 (.80)
Faculty members in my department have received tenure based at least in part on SoTL.	2.19 (.90)	2.69 (.88)	2.81 (.83)	2.36 (.84)
Other departments provide more support for SoTL than my department does.	2.00 (.68)	2.16 (.73)	2.29 (.67)	2.32 (.69)
When hiring new faculty, my department regards applicants' interest in SoTL favorably.	2.72 (.68)	2.90 (.63)	2.84 (.75)	2.53 (.74)
My department chair has actively encouraged involvement in SoTL.	2.32 (.94)	2.84 (.93)	2.82 (.99)	2.44 (.87)

Note. 1 = strongly disagree to 4 = strongly agree. (*M*) = mean; (*SD*) = standard deviation.

case, (e) strengthened the case, and (f) not applicable. For the analyses, we collapsed these options into a negative impact, no impact, or positive impact. Finally, to estimate the importance of specific SoTL activities in departmental decisions, we asked participants to rank order seven typical SoTL activities and products (e.g., peer-reviewed publication, grants, faculty workshops, professional presentation; see Table 9) with regard to importance. Reliability of these questions was $\alpha = .87$.

Procedure

Although we collected data only in 1 year (2017), we also report here the procedure utilized in Gurung et al. (2008), for comparison.

2017 sample. Participants completed the study online via Qualtrics survey software. After

reading a description of the purpose of the study and indicating their willingness to participate using an online consent form, participants completed the materials in the following order: items assessing SoTL activity, items assessing departmental support for SoTL, questions assessing the amount of institutional support for SoTL, items assessing how SoTL is used in hiring and tenure and promotion decisions, questions assessing obstacles to faculty development in SoTL, and finally a demographic measure. Within each block of questions (e.g., questions assessing departmental support for SoTL) participants saw items in random order. On average, it took respondents 25 min to complete the online survey ($SD = 7$ min).

2008 sample. Gurung et al. (2008) recruited participants through APA's Research Office. They received a list of all the psychology departments

Table 5

A Comparison of Responses to Items Referring to Institutional Support of SoTL Among the Three Samples

Statements	2008	2017	2017	2017
	Psych	Psych	Nonpsych	Total
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Over the past 5 years, my institution has reexamined its approach to rewarding SoTL.	2.54 (.80)	2.43 (.76)	2.51 (.78)	2.47 (.77)
Over the past 5 years, my institution has broadened criteria for assessing teaching performance to reflect more fully the principles of SoTL.	2.52 (.73)	2.35 (.78)	2.41 (.80)	2.38 (.79)
Over the past 5 years, my institution has established formal structures to support SoTL.	2.52 (.89)	2.38 (.86)	2.54 (.83)	2.45 (.85)
Top-level academic leaders at my institution have taken significant steps to support SoTL.	2.50 (.86)	2.36 (.90)	2.48 (.82)	2.41 (.86)
Faculty members in formal leadership roles (senate president, department chair, and so on) have actively supported SoTL.	2.62 (.82)	2.60 (.76)	2.50 (.71)	2.55 (.74)
Support for SoTL at my institution is widespread.	2.25 (.75)	2.36 (.78)	2.37 (.74)	2.36 (.75)
SoTL is integrated into other institutional priorities and initiatives.	2.39 (.74)	2.39 (.77)	2.36 (.72)	2.38 (.74)
The criteria for tenure decisions at my institution reflect the principles of SoTL.	2.46 (.73)	2.51 (.78)	2.39 (.75)	2.45 (.77)
The criteria for promotion decisions at my institution reflect the principles of SoTL.	2.41 (.76)	2.49 (.82)	2.39 (.77)	2.44 (.80)
Faculty member at my institution have received tenure based at least in part on SoTL.	2.68 (.74)	2.74 (.81)	2.79 (.74)	2.76 (.78)
There are adequate campus-level funding opportunities for SoTL projects at my institution.	2.50 (.74)	2.24 (.84)	2.19 (.75)	2.21 (.80)
My institution offers adequate release time for SoTL.	1.71 (.69)	1.76 (.78)	1.84 (.63)	1.79 (.72)

Note. 1 = *strongly disagree* to 4 = *strongly agree*. (*M*) = mean; (*SD*) = standard deviation. Bold items for the 2008 data column represents differences between psychology faculty perceptions over time.

and sent them a letter requesting participation in an online survey. The survey they received was identical to that of the 2017 sample except they did not receive the items assessing SoTL activity. The Gurung et al. (2008) article did not report how long it took participants to complete the study.

Results

Our analysis plan consisted of three main steps. We first checked all analyses to ensure statistical assumptions were not violated. Next, we examined our five main areas of interest (faculty engagement in SoTL, perceptions of departmental support for SoTL, of institutional support for SoTL, perceived obstacles to SoTL, and perceptions of SoTL's role in personnel decisions) in our current sample as a whole, as they vary across psychology and nonpsychology faculty, as they vary over time, and as they vary between

institutions and gender. To assess the current state of SoTL we use basic descriptive statistics (e.g., mean, frequency, etc.). To assess how psychology faculty differ from nonpsychology faculty, longitudinal differences in SoTL perceptions, and institutional and gender differences in SoTL perceptions, we conducted several multivariate analyses of variance (MANOVA) with a full Bonferroni post hoc analyses (with p set at .05) to correct for Type I error. We also used MANOVAs to examine subgroups of perceptions grouping items related to SoTL activity, perceived departmental and institutional support, and obstacles to SoTL. As the questions regarding the role SoTL has in personnel decision did not meet the assumptions of parametric analyses (not interval or ratio data) we used the nonparametric analogs of a Mann-Whitney U test for Median Ranks and Kruskal-Wallis H test.

Table 6
A Comparison of Responses to Items Referring to Institutional Support of SoTL Among Institutional Type

Statements	Community college	Bachelor	Master's	Doctorate
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Over the past 5 years, my institution has reexamined its approach to rewarding SoTL.	2.12 (.61)	2.55 (.82)	2.54 (.76)	2.47 (.70)
Over the past 5 years, my institution has broadened criteria for assessing teaching performance to reflect more fully the principles of SoTL.	2.25 (.72)	2.44 (.75)	2.45 (.77)	2.42 (.76)
Over the past 5 years, my institution has established formal structures to support SoTL.	2.22 (.71)	2.51 (.90)	2.58 (.83)	2.39 (.85)
Top-level academic leaders at my institution have taken significant steps to support SoTL.	2.22 (.80)	2.51 (.89)	2.52 (.87)	2.30 (.81)
Faculty members in formal leadership roles (senate president, department chair, and so on) have actively supported SoTL.	2.32 (.74)	2.76 (.79)	2.62 (.72)	2.34 (.71)
Support for SoTL at my institution is widespread.	1.96 (.60)	2.49 (.77)	2.44 (.77)	2.10 (.66)
SoTL is integrated into other institutional priorities and initiatives.	2.22 (.66)	2.47 (.74)	2.44 (.74)	2.23 (.76)
The criteria for tenure decisions at my institution reflect the principles of SoTL.	2.03 (.70)	2.52 (.70)	2.58 (.70)	2.30 (.75)
The criteria for promotion decisions at my institution reflect the principles of SoTL.	2.12 (.80)	2.51 (.80)	2.56 (.75)	2.22 (.71)
Faculty member at my institution have received tenure based at least in part on SoTL.	2.28 (.73)	2.82 (.74)	2.93 (.68)	2.51 (.76)
There are adequate campus-level funding opportunities for SoTL projects at my institution.	2.00 (.85)	2.31 (.77)	2.32 (.81)	2.32 (.76)
My institution offers adequate release time for SoTL.	1.47 (.66)	1.72 (.68)	1.85 (.76)	1.81 (.67)

Note. 1 = strongly disagree to 4 = strongly agree. (*M*) = mean; (*SD*) = standard deviation.

Data Cleaning and Evaluation of Assumptions

For the following analyses, we conducted several prescreening procedures as well as anal-

ysis assumption procedure for MANOVAs. We first screened data for missing cases (Abu-Bader, 2010). On several variables there were missing cases and as suggested by Abu-Bader (2010), when missing data was less than 5%, we

Table 7
Perceived Obstacles for Conducting SoTL Research Among the Three Samples

Statements	2008	2017	2017	2017
	Psych <i>M (SD)</i>	Psych <i>M (SD)</i>	Nonpsych <i>M (SD)</i>	Total <i>M (SD)</i>
The tension between demands for research productivity and SoTL is an obstacle.	2.57 (.93)	2.38 (.95)	2.99 (.94)	2.67 (.99)
Confusion among faculty about what constitutes SoTL is an obstacle.	2.94 (.75)	2.65 (.84)	3.03 (.74)	2.83 (.81)
Lack of leadership among top-level administrators is an obstacle.	2.88 (.86)	2.84 (.91)	2.79 (.81)	2.81 (.86)
Many faculty members' perception of SoTL as an addition to their workload is an obstacle.	3.09 (.76)	2.89 (.78)	3.11 (.68)	2.99 (.74)

Note. 1 = strongly disagree to 4 = strongly agree. (*M*) = mean; (*SD*) = standard deviation. Bold items for the 2008 data column represents differences between psychology faculty perceptions over time. Bold items for the 2017 data columns represent statistically significant differences between psychology and nonpsychology faculty.

Table 8

Summary of Chi-Square for Independence Tests on Percentage of Respondents Endorsing Impact of SoTL on Personnel Decisions

Type of decision	2008 Psychology			2017 Psychology			2017 Nonpsychology			2017 Total		
	Negative impact	No impact	Positive impact	Negative impact	No impact	Positive impact	Negative impact	No impact	Positive impact	Negative impact	No impact	Positive impact
	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)
Hiring	3 (2.1)	108 (76.1)	31 (21.8)	2 (1.1)	133 (73.9)	45 (25)	3 (1.9)	112 (70)	45 (28.1)	5 (1.5)	245 (72.1)	90 (26.5)
Tenure	1 (.7)	76 (53.5)	65 (45.8)	1 (.6)	104 (57.8)	75 (41.7)	2 (1.3)	82 (51.3)	76 (47.5)	3 (.9)	186 (54.7)	151 (44.4)
Promotion	2 (1.4)	74 (52.1)	66 (46.5)	2 (1.1)	98 (54.4)	80 (44.4)	1 (.6)	84 (52.5)	75 (46.9)	3 (.9)	182 (53.5)	155 (45.6)
Merit Pay	3 (2.1)	107 (75.4)	32 (22.5)	26 (14.4)	123 (68.3)	31 (17.2)	21 (13.1)	114 (71.3)	25 (15.6)	47 (13.8)	237 (69.7)	56 (16.5)
PTR	3 (2.1)	111 (78.2)	28 (19.7)	0 (0)	155 (86.1)	25 (13.9)	2 (1.3)	135 (23)	23 (14.4)	2 (.6)	290 (85.3)	48 (14.1)

Note. *f* = frequency; (PTR) = posttenure review. Percentages will not add up to 100 as some respondents endorsed a "not applicable" option. Bold indicates significant differences between psychology and nonpsychology faculty in the 2017 sample, and psychology faculty across time points at the $p < .05$ level.

replaced the value with the mean or median. This occurred for 12 separate variables among the five grouped variables. We conducted before and after replacement analyses, and the replacement of the values did not affect the results (i.e., the results were the same with or without missing values). To detect extreme outliers, we computed *z*-scores for each case on each measure aiming to remove any value that had a *z*-score greater than ± 3.0 (Abu-Bader, 2010). No cases exceeded this value. We then assessed normality of each distribution, skewness divided by the standard error of skewness, and kurtosis divided by the standard error of kurtosis, which revealed no violation of normality (Abu-Bader, 2010). Therefore, the observed data did not violate the assumptions of subsequent analyses. For the MANOVA analyses, we assessed homogeneity of variance and did not find a violation of this assumption. We also

assessed the linear relationship among the variables within each subset of the five main variables using Pearson's correlations and Bartlett's test of sphericity (please refer to Appendixes for correlation matrices). Each of the five sets of variables were linearly related. We assessed multicollinearity with Pearson's correlations, and none of the variables violated this assumption ($r_s < .80$). Thus, the data met the assumptions of all analyses we conducted.

Interest Area 1: Faculty Engagement in SoTL

Current state of SoTL. To better understand the current state of SoTL research, participants indicated their overall involvement in several types of SoTL activities. As presented in Table 2, the average faculty member we surveyed reported that one third of their depart-

Table 9

A Comparison of Reported Departmental Rank of Importance for SoTL Products Among the Three Samples

Type of product	2008 Psych		2017 Psych			2017 Nonpsych		
	<i>Mdn</i> Rank	<i>M</i> Rank (<i>SD</i>)	<i>Mdn</i> Rank	<i>M</i> Rank (<i>SD</i>)	<i>U</i> (<i>r</i>)	<i>Mdn</i> Rank	<i>M</i> Rank (<i>SD</i>)	<i>U</i> (<i>r</i>)
Peer-reviewed publication	1	3.20 (2.63)	1	1.90 (1.37)	2.47 (.16)	1	2.47 (1.39)	1.21 (.07)
Professional presentation	3	3.66 (2.22)	3	3.00 (.88)	.98 (.06)	3	2.86 (.86)	1.65 (.09)
Leading faculty workshop	2	3.11 (1.89)	4	4.19 (1.01)	6.48 (.37)	4	4.06 (1.12)	1.13 (.06)
Attending faculty workshop	3	4.07 (1.96)	6	5.63 (1.21)	6.46 (.37)	5	5.31 (1.45)	2.33 (.13)
Development of a portfolio	4	4.21 (1.74)	7	6.27 (1.09)	9.59 (.55)	6	5.98 (1.29)	2.18 (.12)
Receiving a grant	5	4.90 (1.18)	2	2.87 (1.87)	9.60 (.56)	3	3.23 (1.81)	2.14 (.12)
Evidence of teaching impact	5	4.99 (1.07)	4	4.22 (1.79)	3.44 (.20)	5	4.87 (1.88)	3.18 (.18)

Note. Lower median rank values indicate higher levels of importance ratings. Bold indicates significant differences at the $p < .05$ level. (*U*) = Mann Whitney U statistic. (*r*) is the effect size for a Mann Whitney U. (*SD*) = standard deviation.

mental colleagues and one fourth of their institutional colleagues were involved in SoTL work. When asked about their own SoTL engagement, faculty members reported completing an average of three peer-reviewed SoTL articles, one nonpeer-reviewed SoTL article, one SoTL book chapter, and presenting at an average of nine SoTL-related conferences or workshops.

Psychology versus nonpsychology. To understand if there were differences between psychology and other academic disciplines we conducted a MANOVA on the 10 engagement variables. The results indicate a significant effect for the MANOVA, Wilks' $\lambda = .92$, $F(10, 238) = 2.036$, $p = .031$, $\eta_p^2 = 0.08$. There was a significant difference in engagement for the amount of SoTL book chapters faculty have completed, $F(1, 238) = 5.025$, $p = .026$, $\eta_p^2 = 0.02$. Cohen (1988) suggest that $\eta_p^2 \leq .01$ are considered small, $\eta_p^2 \leq .06$ and considered medium, and $\eta_p^2 \geq 0.14$ are considered large. Specifically, psychology faculty ($M = 1.58$, $SD = 4.11$) engaged in more SoTL than other academic disciplines ($M = 0.63$, $SD = 3.30$). However, the opposite occurred in the number of years engaged in SoTL, $F(1, 238) = 4.121$, $p = .043$, $\eta_p^2 = 0.02$, where psychology faculty ($M = 9.33$ years, $SD = 8.06$ years) have not been conducting SoTL as long as faculty in other academic disciplines ($M = 11.65$ years, $SD = 9.94$ years; see Table 2 for means and standard deviations). Given the engagement questions are unique to this study we could not conduct analyses of change with the 2008 data.

Institution type and gender. Given that SoTL activity may be related to the type of institution at which one is employed, we tested for differences in SoTL activity by institution type (e.g., community, baccalaureate, master's, or doctorate granting colleges and universities) using a MANOVA. The results of this analysis determined that there were no significant differences by institution type, Wilks' $\lambda = .84$, $F(10, 231) = 0.164$, $p = .100$, $\eta_p^2 = 0.05$.

Next, we compared the differences between self-identified male and female faculty in their engagement in SoTL using a MANOVA. There is a significant difference between men and women in their total engagement in SoTL, Wilks' $\lambda = .90$, $F(10, 230) = 2.49$, $p = .001$, $\eta_p^2 = 0.10$. Specifically, men, as compared with women, were engaged in SoTL longer (men

$M = 12.96$ years, $SD = 11.22$ years vs. women $M = 8.89$ years, $SD = 6.85$ years), $F(1, 230) = 11.98$, $p = .001$, $\eta_p^2 = 0.05$; have had more SoTL articles published (men $M = 6.08$, $SD = 15.45$ vs. women $M = 2.45$, $SD = 6.94$), $F(1, 230) = 6.33$, $p = .013$, $\eta_p^2 = 0.03$; have written more SoTL book chapters (men $M = 2.25$, $SD = 5.00$ vs. women $M = 0.72$, $SD = 2.09$), $F(1, 230) = 11.29$, $p = .001$, $\eta_p^2 = 0.05$; and have completed more SoTL presentations (men $M = 14.04$, $SD = 19.82$ vs. women $M = 7.88$, $SD = 10.13$), $F(1, 230) = 10.195$, $p = .002$, $\eta_p^2 = 0.05$. No other differences were found.

Interest Area 2: Faculty Perceptions of Departmental Support for SoTL

Current state of SoTL. As illustrated in Table 3, in the 2017 sample, most faculty members rated their respective departments as typically supporting SoTL. Total sample means ranged from the highest $M = 3.03$ on "My department's policies encourage faculty to reflect on their teaching practices" to the lowest $M = 1.81$ on "My department offers adequate release time to faculty who engage in SoTL." on a 4-point Likert-type scale where 4 = *strongly agree*. In general, all the faculty provided average agreement scores with the 14 statements on the departmental support of SoTL. Of note, is that all of the participants also agreed that other departments provide more support for SoTL than their own department (see Table 3 for means and standard deviations).

Psychology versus nonpsychology. First, we examined perceptions of departmental support for SoTL among current psychology and nonpsychology faculty using a MANOVA. The results indicate that there was a significant effect between the two samples, Wilks' $\lambda = .86$, $F(14, 325) = 3.72$, $p < .001$, $\eta_p^2 = 0.14$. In investigating the between-subjects effects, there were six significant differences between psychology and nonpsychology faculty perceptions. First, on the perceived support for policies that encourage reflection on teaching, psychology faculty agree more than nonpsychology faculty, $F(1, 325) = 11.52$, $p = .001$, $\eta_p^2 = 0.03$. Second, psychology faculty agreed more than nonpsychology faculty that there were departmental norms encouraging faculty to engage in SoTL, $F(1, 325) = 5.60$, $p = .019$, $\eta_p^2 = 0.02$. Third, psychology faculty agreed less than non-

psychology faculty that some departmental colleagues find their SoTL work problematic, $F(1, 325) = 16.40, p < .001, \eta_p^2 = 0.05$. Fourth, psychology faculty agreed less than nonpsychology faculty that other departments provide more support for SoTL than their department, $F(1, 325) = 17.13, p < .001, \eta_p^2 = 0.05$. Fifth, psychology faculty agreed more than nonpsychology faculty that their department regards applicants' interests in SoTL favorably when hiring, $F(1, 325) = 10.95, p = .001, \eta_p^2 = 0.03$. Finally, psychology faculty agreed more than nonpsychology faculty that their chair actively encourages them to engage in SoTL, $F(1, 325) = 4.46, p = .035, \eta_p^2 = 0.01$. Therefore, in general, psychology faculty perceived more departmental support for SoTL than did nonpsychology faculty (see Table 3 for means and standard deviations).

Psychology past and present. We then compared the psychology faculty surveyed in 2017 to the psychology faculty surveyed in 2008 to see if there were any differences in perceptions of these issues over time. The results of the MANOVA indicate longitudinal differences across samples, Wilks' $\lambda = .92, F(14, 307) = 2.13, p = .01, \eta_p^2 = 0.08$. Between-subjects effects indicate that the perception that other faculty members are actively involved increased from 2008 to 2017, $F(1, 307) = 4.49, p = .035, \eta_p^2 = 0.01$. On the other hand, the perception that some colleagues found SoTL work problematic decreased from 2008 to 2017, $F(1, 307) = 14.85, p < .001, \eta_p^2 = 0.04$. Additionally, the perception that other departments provide more support for SoTL than the home department decreased from 2008 to 2017, $F(1, 307) = 6.11, p = .01, \eta_p^2 = 0.02$. Finally, the perception that when hiring new faculty the department regards applicants' interest in SoTL favorably increased from 2008 to 2017, $F(1, 307) = 6.24, p = .01, \eta_p^2 = 0.02$. In general, respondents perceived their departmental views toward SoTL more positively over time. There were no other longitudinal differences detected.

Institution type and gender. To investigate whether departmental support for SoTL varied by institution type, we conducted a MANOVA. There were significant differences among the different types of institutions on perceived departmental support for SoTL, Wilks' $\lambda = .36, F(14, 436) = 0.36, p = .99, \eta_p^2 = 0.01$ (see Table 4 for the means and standard devia-

tions for this analysis). The between-subjects effects and Bonferroni post hoc analyses indicate that several of the individual variables were significantly different among the various types of institutions. After controlling for Type I error, there was a significant difference on perceptions that departmental policies encourage faculty to reflect on their teaching practices, $F(3, 433) = 4.79, p = .003, \eta_p^2 = 0.03$, where baccalaureate faculty agreed with this statement more strongly than doctorate-level faculty (no other differences were found).

There were a number of other significant differences across institutions. Regarding the statement that other faculty members are actively involved in SoTL, $F(3, 433) = 4.34, p = .005, \eta_p^2 = 0.03$, baccalaureate faculty had higher rates of agreement than doctorate-level faculty (no other differences were observed). In regard to the institution providing adequate financial support for faculty to engaging in SoTL, $F(3, 433) = 5.36, p = .001, \eta_p^2 = 0.04$, community college faculty agreed with this statement significantly less than baccalaureate- and master's-level faculty (no other differences were observed). Regarding norms that encourage participation in SoTL, $F(3, 433) = 4.88, p = .002, \eta_p^2 = 0.03$, baccalaureate faculty agreed with this statement significantly more than community college and doctoral-level faculty. Both baccalaureate- and master's-level faculty demonstrated greater levels of agreement than community college faculty that members in other departments are actively involved in SoTL, $F(3, 433) = 11.73, p < .001, \eta_p^2 = 0.07$.

There were also differences in tenure decisions that reflect principles of SoTL, $F(3, 433) = 12.32, p < .001, \eta_p^2 = 0.08$, where baccalaureate faculty agreed with this statement significantly more than community college and doctorate-level faculty. Baccalaureate- and master's-level faculty agreed more with the statement that departmental members have received tenure based on SoTL work, $F(3, 433) = 8.93, p < .001, \eta_p^2 = 0.06$, as compared with community college and doctorate-level faculty. There was also a difference in perceptions of how the department regards applicants' interest in SoTL when hiring, $F(3, 433) = 6.36, p < .001, \eta_p^2 = 0.04$, where baccalaureate faculty had greater levels of agreement than doctorate-level faculty. Finally, there were differences in the perception that their de-

partment chair had actively encouraged involvement in SoTL, $F(3, 433) = 6.28, p < .001, \eta_p^2 = 0.04$. Baccalaureate- and master's-level faculty had higher levels of agreement with this statement than community college and graduate-level faculty.

To investigate whether there were gender differences in perceived departmental support for SoTL, we conducted a MANOVA on the 14 variables. Results indicate that there were no gender differences, Wilks' $\lambda = .36, F(14, 436) = 0.36, p = .99, \eta_p^2 = 0.01$.

Interest Area 3: Faculty Perceptions of Institutional Support for SoTL

Current state of SoTL. As illustrated in Table 5, in the 2017 sample, most faculty members rated their respective institutions as typically supporting SoTL. Total sample means ranged from the highest on "faculty members in formal leadership role (faculty senate, department chair, and so on) have actively supported SoTL" to the lowest on "my institution offers adequate release time to faculty who engage in SoTL." In general, all the faculty agreed with the 12 statements on the institutional support of SoTL with the exception of the release time question (see Table 5 for means and standard deviations).

Psychology versus nonpsychology. To examine current perceptions of institutional support for SoTL among current faculty, we again examined our 2017 sample using a MANOVA. The results indicate that there was a significant effect, Wilks' $\lambda = .94, F(12, 327) = 1.86, p = .039, \eta_p^2 = 0.06$. However, upon investigating the between-subjects effect, there were no significant differences between psychology and nonpsychology faculty perceptions of institutional support of SoTL ($p > .05$); see Table 5 for the means and standard deviations.

Psychology past and present. With regard to differences in psychology faculty perceptions across time, we conducted a MANOVA on the 12 variables comparing the 2008 psychology faculty perceptions to the 2017 faculty perceptions. The results of the MANOVA indicated that there was a significant longitudinal difference between the two time periods, Wilks' $\lambda = .91, F(12, 327) = 2.45, p = .005, \eta_p^2 = 0.09$. Interestingly, when investigating the between-subjects effects the only two differences found

were that the 2017 sample perceived that over the past 5 years, their institution had broadened the criteria for assessing teaching performance to reflect SoTL more fully, than the 2008 sample, $F(1, 327) = 4.22, p = .04, \eta_p^2 = 0.01$. In contrast, the other difference was that the 2017 sample reported less agreement to the item regarding adequate campus-level funding opportunities for SoTL projects on campus than the 2008 sample, $F(1, 327) = 8.55, p = .004, \eta_p^2 = 0.03$. In other words, from a longitudinal perspective, psychology faculty members believe that the incorporation of SoTL into assessing teaching performance has increased but that funding for SoTL has decreased. There were no other significant longitudinal differences found in perceived institutional support (see Table 5 for the means and standard deviations).

Institution type and gender. To investigate whether institutional support for SoTL varied by institution type, we conducted a MANOVA. There were significant differences among the different types of institutions on perceived institutional support for SoTL, Wilks' $\lambda = .83, F(12, 435) = 2.33, p < .001, \eta_p^2 = 0.06$. The between-subjects effects and Bonferroni post hoc analyses indicate several significant differences among institutions (see Table 6 for the means and standard deviations for this analysis).

After controlling for Type I error, there were a number of significant differences on perceptions. Baccalaureate and master's-level faculty agreed that over the past 5 years their institution reexamined its approach to rewarding SoTL significantly more than community college faculty (no other differences were found), $F(3, 435) = 2.95, p = .032, \eta_p^2 = 0.02$. Baccalaureate faculty had higher rates of agreement than community college and doctorate-level faculty and doctorate-level faculty had significantly higher agreement than master's-level faculty that members in formal leadership roles actively supported SoTL, $F(3, 435) = 8.10, p < .001, \eta_p^2 = 0.05$. There was also a difference among institutions that there is widespread support for SoTL, $F(3, 435) = 9.52, p = .001, \eta_p^2 = 0.06$. Baccalaureate- and master's-level faculty had significantly greater agreement than both community college and doctorate-level faculty.

Concerning the belief that the criteria for promotion decisions at their institution reflect the principles of SoTL, $F(3, 435) = 6.34, p <$

.001, $\eta_p^2 = 0.04$, master's-level faculty endorsed the item more than community college and doctorate faculty, and doctorate faculty were higher than baccalaureate faculty. Relatedly, faculty across institutions varied in their belief that the criteria for tenure reflect the principles of SoTL, $F(3, 435) = 6.93, p < .001, \eta_p^2 = 0.08$, where both baccalaureate- and master's-level faculty agreed with this statement more than community college faculty and master's-level faculty agreed more than doctorate-level faculty. There were also differences among institutions in the belief that faculty members have received tenure based at least in part on SoTL, $F(3, 435) = 12.00, p < .001, \eta_p^2 = 0.08$. Baccalaureate-, master's-, and doctorate-level faculty agreed with this statement significantly more than community college faculty and baccalaureate faculty agreed more than doctorate-level faculty. Finally, master's- and doctorate-level faculty agreed with the statement that institutions offered adequate release time for SoTL more than community college faculty, $F(3, 435) = 2.94, p = .03, \eta_p^2 = 0.02$. No other significant differences were found.

To investigate whether there were perceived gender differences in institutional support for SoTL, we conducted a MANOVA on the 14 variables. There were no gender differences, Wilks' $\lambda = .36, F(14, 436) = 0.36, p = .99, \eta_p^2 = 0.01$.

Interest Area 4: Perceived Obstacles to Engaging in SoTL

Current state of SoTL. As illustrated in Table 7, the highest perceived obstacle to conducting SoTL research was that many faculty members view SoTL as *additional* workload. The second most perceived obstacle is the confusion among faculty about what constitutes SoTL. In other words, current faculty believe that the very definition of SoTL can be an obstacle to engaging in this type of research. This is followed by the lack of leadership among top-level administrators and the tension between demands of research productivity (other than SoTL) and SoTL. All of the obstacles to conducting SoTL were generally perceived as legitimate and agreed upon obstacles (see Table 7 for means and standard deviations).

Psychology versus nonpsychology. To assess difference between psychology and non-

psychology faculty perceptions of obstacles to conducting SoTL, we conducted a MANOVA on the four items in this area. There were significant differences between the two samples, Wilks' $\lambda = .87, F(4, 335) = 12.97, p < .001, \eta_p^2 = 0.13$. Specifically, nonpsychology faculty perceived the obstacle of the tension between demands for research productivity and SoTL, $F(1, 335) = 34.19, p < .001, \eta_p^2 = 0.09$, the confusion among faculty about what constitutes SoTL, $F(1, 335) = 19.74, p < .001, \eta_p^2 = 0.06$, and that many faculty members' perception of SoTL as an addition to their workload, $F(1, 335) = 7.54, p = .006, \eta_p^2 = 0.02$, as greater than psychology faculty. There was no difference between the two samples on the lack of leadership among top-level administrators (see Table 7 for means and standard deviations).

Psychology past and present. In order to determine if there were longitudinal changes in the perceived obstacles of conducting SoTL, we conducted a MANOVA on the four variables. The perceived obstacles have decreased over the 10-year period, Wilks' $\lambda = .96, F(4, 317) = 3.62, p = .007, \eta_p^2 = 0.04$. Specifically, the 2017 sample viewed the obstacles of confusion among faculty about what constitutes SoTL, $F(1, 317) = 10.09, p = .002, \eta_p^2 = 0.06$, and many faculty members' perception of SoTL as adding to their workload, $F(1, 317) = 5.70, p = .018, \eta_p^2 = 0.02$, as less of an obstacle than the 2008 sample. The perceived obstacles to conducting SoTL are decreasing over time (see Table 7 for means and standard deviations).

Institution type and gender. To investigate whether perceived obstacles for conducting SoTL varied by institution type, we conducted a MANOVA. There were significant differences among the different types of institutions, Wilks' $\lambda = .83, F(3, 443) = 7.06, p < .001, \eta_p^2 = 0.06$. The between-subjects effects and Bonferroni post hoc analyses led to our conclusions that there was a difference among institutions on the tension between demands for research productivity and SoTL, $F(3, 443) = 14.80, p < .001, \eta_p^2 = 0.09$. Specifically, community college faculty ($M = 1.81, SD = 1.01$) disagreed significantly more than faculty at baccalaureate colleges and universities ($M = 2.53, SD = 0.89$), master's universities ($M = 2.57, SD = 0.95$), and doctorate universities ($M = 3.02, SD = 0.95$). Additionally, baccalaureate and master's institution faculty disagreed more with this

statement than doctorate institutions. All $ps < .05$. In other words community college faculty did not feel this was an obstacle whereas the three other institutional type-faculty did and doctorate institution-faculty felt that it was even more of an obstacle than baccalaureate and master's faculty. There was also a significant difference among the institutional faculty on the obstacle that SoTL adds to workload, $F(3, 443) = 6.62, p < .001, \eta_p^2 = 0.04$. Specifically, community college faculty ($M = 3.52, SD = 0.57$) agreed significantly more than baccalaureate colleges and university faculty ($M = 2.96, SD = 0.71$), master's university faculty ($M = 2.91, SD = 0.79$), and doctorate university faculty ($M = 3.01, SD = 0.72$). In other words, faculty at the community college felt SoTL was an additional workload more than did faculty at the other institutional types.

To investigate whether there were perceived gender differences in obstacles to conducting SoTL, we conducted a MANOVA on the four variables. There were no significant gender differences, Wilks' $\lambda = .36, F(4, 446) = 0.76, p = .55, \eta_p^2 = 0.007$.

Interest Area 5: SoTL and Personnel Decisions

Current state of SoTL. We wanted to understand how faculty perceived their institutions were using SoTL in hiring and promotion decisions and whether they believed that SoTL work within a case for promotion and/or tenure strengthened or weakened the case. We used nonparametric tests for Median Ranks and Kruskal-Wallis H test. As Table 8 illustrates, in general, SoTL does not have a strong positive impact on hiring, tenure, promotion, merit pay, and posttenure review. For example, 26% of the sample believed SoTL positively impacted hiring, 44% for tenure, and 45% for promotion. On the other hand, SoTL appears to have little negative impact on personnel decisions (ranging from 0% to 14%).

In 2017, faculty determined their department would rank the most important SoTL activity as peer-reviewed publications ($f = 194, 57.1\%$), second most important receiving a grant ($f = 57, 16.8\%$), third was evidence of impact SoTL had made on the faculty member's teaching ($f = 35, 10.3\%$), fourth was attending a faculty development workshop ($f = 10, 2.9\%$), fifth was

professional presentation ($f = 7, 2.1\%$), sixth was tied between leading a faculty development workshop ($f = 4, 1.2\%$) and development of a portfolio ($f = 4, 1.2\%$).

Psychology versus nonpsychology. When comparing the 2017 psychology faculty to the 2017 nonpsychology faculty, we conducted chi-square for independence tests on the amount of importance SoTL had on personnel decisions. The frequencies of all the personnel decisions were not dependent on whether the responses were from psychology or nonpsychology faculty ($ps > .05$). Specifically, both psychology and nonpsychology faculty had similar proportions in the impact of SoTL on personnel factors (e.g., hiring, tenure, promotion, etc.; see Table 8 for frequencies).

To understand the differences in rank order between psychology and nonpsychology faculty, a Mann-Whitney U test for was conducted. Psychology faculty ranked attending a workshop and developing a portfolio lower than nonpsychology faculty. In contrast, psychology faculty ranked receiving a grant and the evidence of teaching impact SoTL has higher than nonpsychology faculty. There were no other differences detected (see Table 9 for means, medians, standard deviations and effect size statistics).

Psychology past and present. To assess whether there were longitudinal changes in the impact SoTL had on personnel decisions, we conducted a chi-square for independence. Perceptions regarding the impact SoTL on hiring, tenure, and promotion did not change across time ($p > .05$). However, there was a difference between 2008 on the impact SoTL has on merit pay ($df = 2, \chi^2 = 15.01, p = .001, \text{Cramer's } V = .22$) and posttenure review ($df = 2, \chi^2 = 6.05, p = .049, \text{Cramer's } V = .14$). In both of these results, we observed an increase in proportion of no impact and positive impact perceptions (see Table 8 for frequencies).

To assess longitudinal rank order differences between the 2008 and 2017 psychology faculty samples, we conducted a Mann-Whitney U on median ranks. There are significant differences in the two time periods with the exception of the importance of professional presentations ($p > .05$). Specifically, the 2008 sample ranked peer-reviewed publication, receiving a SoTL grant, and evidence of teaching as lower than the 2017 sample. In contrast, the 2017 sample ranked

leading faculty workshops, attending faculty workshops, and the development of a portfolio significantly lower than the 2008 sample (see [Table 9](#) for median and mean ranks along with U and r statistics).

Institution type and gender. As there were too few participants in the negative impact category across most personnel decisions, a chi-square for independence was not conducted to determine if institutional type influenced the SoTL impact on personnel decisions. As we determined by the chi-square for independence, there were no gender differences detected among how SoTL impacts personnel decisions ($ps > .05$; see [Table 8](#) for frequencies).

In order to determine if there were differences among the institution types on the rank order of personnel decisions, a Kruskal-Wallis H nonparametric analog to an analysis of variance was conducted. After adjusting for Type I error, there were no significant differences among the institution type on the rankings ($ps > .05$). To determine if there were gender differences in the rank order of personnel decisions, a Mann-Whitney U was conducted on the seven items. There were three significant differences, however, after controlling for Type I error, there were no differences between male and female rankings ($ps > .05$; see [Table 9](#) for median and mean ranks).

Discussion

We are the first researchers to simultaneously provide a snapshot of current engagement in SoTL in psychology and across disciplines, differences in SoTL engagement and perceptions between psychology and nonpsychology faculty, changes in psychology faculty perceptions over time, and variance in SoTL perceptions between institutions and gender. For practitioners of SoTL, the news is mostly good. Most faculty members in our sample rated their respective departments and institutions as typically supporting SoTL. In comparison with past surveys (e.g., [Buch, 2008](#); [Gurung et al., 2008](#); [Huber & Hutchings, 2005](#)), SoTL is now more valued than it has been in the past on some dimensions. We also report some differences in engagement and perceptions between psychology and nonpsychology faculty, across time, and across institutions. We only found one sig-

nificant gender difference. We chronicle these trends here.

What Is the Current State of SoTL Engagement?

It seems clear that our sampling procedure was successful in reaching individuals engaged in SoTL research, with survey year 2017 faculty reporting an average involvement in SoTL work of over 10 years, averaging over three SoTL journal articles and nine SoTL conference presentations.

Focusing on psychology faculty shows a fair amount of activity, although we cannot compare engagement with either past reports (engagement items were not in the 2008 study), or to productivity in nonpedagogical areas. Psychology faculty did have higher level of SoTL engagement, even though they reported conducting SoTL for less time than nonpsychology faculty. Given that many faculty in academia are either not involved in SoTL or have not “joined the party” ([Bortolin, 2018](#)), we take the levels of engagement identified as a positive sign of things to come. Respondents perceived a third of departmental colleagues as doing SoTL, a quarter of campus colleagues, and reported being engaged for some time. Whereas the number of peer-reviewed journals reported during the same duration suggests low productivity, one must remember that many of the respondents are conducting SoTL together with other nonpedagogical research as well. Consistent with [Hutchings, Huber, and Ciccone \(2011\)](#), our data show that SoTL is an ongoing endeavor in departments across the nation.

How Do Psychology and Nonpsychology Faculty Member Perceptions of SoTL Vary?

Psychology faculty’s perceptions of support for SoTL in general were more positive than perceptions of nonpsychology faculty. We found that only six out of 14 departmental perceptions were different, suggesting that the different disciplines may be more alike than different. This idea is underlined by the fact that we did not find differences between disciplines on institutional support or perceptions of the impact of SoTL on personnel decisions. Psychology faculty perceived more departmental

support for SoTL and less obstacles to doing SoTL than did nonpsychology faculty.

From the departmental perspective, psychology faculty agree more than nonpsychology faculty that departmental policies valued teaching reflection, departmental norms supported SoTL activity, and the department chair encouraged SoTL involvement. It seems almost natural that this would be the case, given the nature of our discipline. Psychologists study topics such as memory, so this may lead to more positive attitudes about research on our students' learning outcomes than would be expected in other disciplines (Chew et al., 2018).

It is a bit surprising that even though nonpsychology faculty in this sample have been engaged in SoTL for a longer period of time than psychology faculty, nonpsychology faculty members' attitudes are often more negative, and the faculty perceive more common obstacles than do psychology faculty. Based on further analyses, nonpsychology faculty were older than psychology faculty. Perhaps more experienced faculty are a bit more cynical about the future, whether that be grant support, departmental or institutional support, colleagues' appreciation, and so on. Perhaps in nonpsychology environments, the attraction to SoTL makes the faculty member a bit of an outlier, whereas in psychology it seems that SoTL has generally gained more acceptance over time. Correspondingly, when considering hiring a new faculty member, the applicant's interest in SoTL activity is ranked higher in importance by psychology faculty than by nonpsychology faculty.

Additionally, when examining current levels of generativity among psychology and nonpsychology faculty concerning the amount and type of SoTL activity, only one significant difference emerges (see Table 2): Nonpsychology faculty report more years of engagement with SoTL research than psychology faculty. This difference is not significant once age is used as a covariate. This lack of difference may be important in that (a) perceptions that social scientists may be better practitioners of SoTL lack an empirical basis (Chick, 2014); and (b) it is likely psychology educators could learn a great deal about SoTL research from and collaborating with other engaged nonpsychology faculty. To foster this second possibility, *Scholarship of Teaching and Learning in Psychology* features cross-fertilization articles written by faculty

outside of psychology (e.g., physics, Hake, 2015 and sociology, McKinney et al., 2017).

Although we did not find differences between disciplines in perceptions of how SoTL is used in personnel decisions, we did detect some differences in how different activities are ranked. A creative experimental study helps us understand why this may be the case. Secret, Leisey, Lanning, Polich, and Schaub (2012) created different vignettes/examples of SoTL work. These included a peer-reviewed data-driven article, peer-reviewed conceptual article, data-driven presentation, case studies, and faculty using social media to promote SoTL. They asked faculty in one institution to determine if these vignettes should be used in merit and hiring decisions. Interestingly, the data-driven examples were rated the highest and the conference presentations and conceptual papers the lowest. Secret et al.'s (2012) results may shed light on our findings. Specifically, using SoTL for personnel decisions may be moderated by the type of SoTL that the person is engaged in (i.e., data-driven peer-reviewed articles). Although we did not measure the type of SoTL our respondents conducted, we recommend this level of measurement for future research.

How Have Perceptions of SoTL Changed Over time?

Where we found evidence for change, it was for the most part, positive. In general, respondents perceived their departmental views toward SoTL more positively over time but we found only minor institutional change over time (only two items significantly different). Perceptions of half the obstacles to conducting SoTL are decreasing over time. We found an increase in the proportion of "no impact" and "positive impact" perceptions of SoTL on merit pay and posttenure review decisions. When we did find significant changes over time, the trend is for greater support for SoTL efforts (e.g., department policies promote teaching reflection, more faculty actively involved in SoTL) and less criticism of SoTL efforts (e.g., departmental colleagues finding SoTL work problematic, receiving less support compared with other departments). Taken together, we suggest that SoTL is slowly becoming an accepted form of scholarship.

From an institutional perspective, there were only two substantive changes in faculty perspectives during the past 10 years. The 2017 psychology faculty reported lower agreement to items relating to (a) teaching performance criteria reflecting the principles of SoTL, and (b) adequate funding for SoTL projects. Perhaps these lower scores over time reflect savvy SoTL researchers who are now having discussions about SoTL. Whereas the lack of funding or absence of criteria may have existed before, with faculty doing more SoTL, these institutional shortcomings become more visible. The more negative perceptions of adequate funding suggest that faculty want the institution to both value and support SoTL and provide funding, perhaps similar to what disciplinary research receives. It is possible these findings are symptoms of growing pains.

Regarding obstacles, SoTL researchers in psychology today (compared with 10 years ago) are less confused about what SoTL is and are more accepting of it as being a normal part of workload. We believe that SoTL is now perceived as more of a mainstream responsibility of some faculty, who should be interested in whether or not their efforts facilitate desirable student outcomes. When psychology faculty rank-ordered seven possible SoTL products/outcomes, peer-reviewed publications remained the top-ranked product. Indeed, publications are often the academic gold standard, and this standard may extend into SoTL work as well. Also gaining in importance during the past 10 years are receipt of a SoTL grant and evidence of SoTL impact. Reflecting a similar pattern, current psychology respondents express stronger agreement that SoTL interest is viewed more favorably for merit pay and posttenure review as compared with 10 years ago.

How Do Perceptions of SoTL Vary Across Institutions and Gender?

Whereas we found no differences in SoTL engagement or the role of SoTL in personnel decisions by type of institution, we did find many other differences. For example, perceptions for departmental support for SoTL was generally strongest at baccalaureate granting institutions as compared with community colleges and doctoral granting institutions. Many significant differences in perceptions of institutional

support for SoTL across institutions exist as well. In general, faculty at baccalaureate granting institutions had highest perceptions of institutional support.

Our inclusion and discussion of institution differences highlights an often-neglected area of higher education. The reality is that faculty at different types of institutions have different pressures and stressors. Course loads vary with the type of school at which a faculty member teaches, and the emphasis on research versus teaching varies as well. It is not surprising that baccalaureate college faculty seem to have the most positive views and experiences with SoTL. More often than not, baccalaureate schools put more of an emphasis on teaching, and in our collective experiences, are more likely to reward efforts to enhance student learning with SoTL. A possible way to test this assumption would be to have department chairs and other college administrators take a version of our survey.

We also suggest that community college and doctorate granting institution faculty have more challenges in conducting SoTL. Differences in engagement level automatically map on to institutional type as the ability to conduct SoTL will naturally interact with how valued it is at the institution and the time the faculty member can be expected to give to it. We believe that faculty at certain types of institutions (e.g., community colleges) may need additional incentives and support from disciplinary organizations such as the Society for the Teaching of Psychology and the American Psychological Association.

Together with a focus on institutional differences, we took a much needed look at gender differences in SoTL engagement and perceptions of SoTL. Of note, we found only one major difference in gender: Male respondents reported engaging in SoTL more than female respondents. No gender differences in perceptions of departmental or institutional support for SoTL, obstacles to SoTL, or the role of SoTL on personnel decisions.

As far as SoTL is concerned, there is a level of gender equity. Women and men feel similarly about how their departments and institutions perceive SoTL and in terms of how it is viewed for personnel decisions. Although we do not interpret evidence of discrimination in our data, the gender difference in engagement bears further scrutiny. Our results take existing re-

search on gender differences in publications (Cama et al., 2016) into the realm of SoTL publications. Are women less likely to get support to conduct SoTL in contrast to traditional research? Whereas our perception data do not document this, the difference in SoTL production is statistically significant and fertile ground for future research to determine the causes.

Limitations and Future Directions

With any research study there are limitations and some elements of our design can be revised for future work. Most importantly, it is difficult to know if the 2017 psychology and nonpsychology faculty samples are representative of their respective populations. Having faculty from different disciplines is a strength, but there is likely a sampling bias within each discipline. Furthermore, we recognize we have combined faculty from many different disciplines in our nonpsychology group and also combined psychologists from different subareas in our psychology group. Whereas not as focused as the Huber and Hutchings (2005) sample that only used Carnegie SoTL scholars (thought also from different disciplines), it is likely that only people who cared about SoTL in the first place responded to the invitation to participate. However, as this would have likely applied equally across both our samples, our comparisons are still meaningful. Also, interpreting data from a cross-sectional design to measure changes in SoTL attitudes among faculty is challenging (i.e., a longitudinal design is more desirable, but so much more difficult to achieve).

Despite these limitations, our results provide SoTL researchers, practitioners, and policymakers with a previously unavailable 10-year comparison within psychology and a current comparison of faculty in and out of psychology departments. Our results add to Hutchings et al.'s (2011) report on SoTL in general providing faculty with key evidence to share with chairs, deans, provosts, presidents, and chancellors, to highlight the importance of conducting SoTL. Of course, key questions for future research remain. It is important to determine the extent to which faculty members are aware of evidence-based research on teaching and learning. Furthermore, beyond having an awareness of SoTL, it is important to measure the extent to which this scholarship been implemented in the

classroom, and if so, how consistently. We shine a light on SoTL activity and perceptions but did not enable a closer look at finer points of the process.

More meaningful questions about dissemination of SoTL literature in the classroom remain to be studied. In particular, there is a need to examine whether research on SoTL is having an impact on the classroom versus the attitudes of those who are probably already predisposed favorably toward SoTL, by virtue of the fact that they participated in the survey. Do students whose instructors use and do SoTL learn better than the students of instructors unaware of SoTL beyond the confounds of instructor passion and enthusiasm?

It is clear that some attitudes about SoTL work are changing over time. There are fewer objections and misunderstandings about SoTL currently as compared with 10 years ago. Interest in SoTL appears on the rise as well. This is a trend that bodes well for all individuals who care about the scholarship of teaching and learning.

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Appendix A

Correlation Matrix for the Perceptions of Engagement in SoTL

Statements	1	2	3	4	5	6	7	8	9	10
1. % of departmental colleagues engaged in SoTL?	—	.72	<i>.13</i>	<i>.10</i>	<i>.01</i>	<i>.06</i>	<i>.10</i>	<i>.11</i>	<i>.00</i>	<i>.05</i>
2. % of institutional colleagues engaged in SoTL		—	<i>.11</i>	<i>.03</i>	<i>.01</i>	<i>.02</i>	<i>.02</i>	<i>.01</i>	<i>.01</i>	<i>.01</i>
3. # of years you have engaged in SoTL			—	.33	.25	.29	.24	.48	.35	.19
4. # of SoTL peer-reviewed journal articles				—	.21	.38	.35	.58	.15	.26
5. # of SoTL nonpeer reviewed articles					—	.16	.17	.33	.20	.06
6. # of SoTL book chapters						—	.35	.59	.60	.19
7. # of SoTL books							—	.20	.08	.21
8. # of SoTL conference presentations								—	.38**	.37
9. # of SoTL nonconference presentations									—	.21
10. # of SoTL grants										—

Note. Italics indicates significant correlation at the $p < .05$ level. Bold indicates significant differences at the $p < .01$ level.

Appendix B

Correlation Matrix for the Perceptions of Departmental Support for SoTL

Statements	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Over the past 5 years, my department has broadened the criteria for assessing teaching performance to more fully reflect the principles of SoTL.	—	.46	.45	.30	.31	.50	<i>-.17</i>	<i>.24</i>	.44	.48	.34	<i>-.13</i>	.42	.50
2. My department's policies encourage faculty to reflect on their teaching practices.		—	.46	.23	.26	.54	<i>-.30</i>	<i>.27</i>	.45	.45	.36	<i>-.24</i>	.47	.54
3. In my department, other faculty members are actively involved in SoTL.			—	.29	.32	.55	<i>-.14</i>	.40	.40	.40	.44	<i>-.17</i>	.42	.50
4. My department offers adequate release time to faculty who engage in SoTL.				—	.51	.34	<i>-.07</i>	.19	.26	.30	.24	<i>-.02</i>	.24	.24
5. My department provides adequate financial support for faculty to engage in SoTL.					—	.45	<i>-.18</i>	.17	.35	.37	.28	<i>-.04</i>	.33	.40
6. Departmental norms encourage participation in SoTL.						—	<i>-.37</i>	.25	.49	.51	.46	<i>-.23</i>	.56	.64
7. Some of my department colleagues find my work in SoTL problematic.							—	<i>.03</i>	<i>-.27</i>	.29	<i>-.17</i>	.25	<i>-.29</i>	<i>-.30</i>
8. Faculty members in other departments at my institution are actively involved in SoTL.								—	.27	.30	.31	<i>.11</i>	.19	.23
9. The criteria for tenure decisions in my department reflect the principles of SoTL.									—	.89	.65	<i>-.08</i>	.47	.49
10. The criteria for promotion decisions in my department reflect the principles of SoTL.										—	.64	<i>-.10</i>	.49	.51
11. Faculty members in my department have received tenure based at least in part on SoTL.											—	<i>-.06</i>	.49	.47
12. Other departments provide more support for SoTL than my department does.												—	.49	.47
13. When hiring new faculty, my department regards applicants' interest in SoTL favorably.													—	.54
14. My department chair has actively encouraged involvement in SoTL.														—

Note. Italics indicates significant correlation at the $p < .05$ level. Bold indicates significant differences at the $p < .01$ level.

(Appendices continue)

Appendix C

Correlation Matrix for the Perceptions of Institutional Support for SoTL

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Over the past 5 years, my institution has reexamined its approach to rewarding SoTL.	—	.63	.57	.56	.42	.41	.45	.50	.45	.42	.38	.27
2. Over the past 5 years, my institution has broadened criteria for assessing teaching performance to reflect more fully the principles of SoTL.		—	.55	.51	.26	.54	.30	.27	.45	.45	.36	.24
3. Over the past 5 years, my institution has established formal structures to support SoTL.			—	.62	.47	.50	.40	.54	.38	.37	.44	.41
4. Top-level academic leaders at my institution have taken significant steps to support SoTL.				—	.54	.56	.48	.60	.47	.46	.41	.37
5. Faculty members in formal leadership roles (senate president, department chair, and so on) have actively supported SoTL.					—	.59	.43	.48	.41	.45	.35	.28
6. Support for SoTL at my institution is widespread.						—	.53	.56	.50	.54	.40	.36
7. The criteria for tenure decisions at my institution reflect the principles of SoTL.							—	.57	.81	.61	.34	.27
8. SoTL is integrated into other institutional priorities and initiatives.								—	.57	.50	.38	.33
9. The criteria for promotion decisions at my institution reflect the principles of SoTL.									—	.66	.37	.26
10. Faculty member at my institution have received tenure based at least in part on SoTL.										—	.33	.28
11. There are adequate campus-level funding opportunities for SoTL projects at my institution.											—	.42
12. My institution offers adequate release time for SoTL.												—

Note. Bold indicates significant differences at the $p < .01$ level.

Appendix D

Correlation Matrix for the Perceptions of the Role SoTL Had in Personnel Decisions

Statements	1	2	3	4	5
1. Your department's most recent hiring decision.	—	.32	.32	.18	.22
2. Your department's most recent tenure decision.		—	.79	.31	.44
3. Your department's most recent promotion decision.			—	.36	.46
4. Your department's most recent merit pay decision.				—	.55
5. Your department's most recent posttenure review decision.					—

Note. Bold indicates significant differences at the $p < .01$ level.

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