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## The Integration of the Scholarship of Teaching and Learning into the Discipline of Communication Sciences and Disorders

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# The Integration of the Scholarship of Teaching and Learning into the Discipline of Communication Sciences and Disorders

## Abstract

McKinney (2018) has argued that for the scholarship of teaching and learning (SoTL) to advance within a discipline, the integration of SoTL must be closely examined and opportunities for growth in SoTL must be recognized and discussed. To that end, this paper reflects on the degree to which SoTL is integrated into communication sciences and disorders (CSD) by examining a variety of topics: perspectives and theories historically valued by our discipline, existing supports for SoTL at various levels (i.e., individual teacher-scholars, departments, institutions, and the CSD discipline as a whole), the application of SoTL findings in teaching and learning. Four specific recommendations are made because of this examination and reflection.

## Keywords

scholarship of teaching and learning, scholarly teaching, integration, speech-language pathology, audiology

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In 1990, audiologist Ernest Boyer published a book titled *Scholarship Reconsidered: Priorities of the Professoriate*, in which he reflected on the diversity of faculty interests, talents, and needs evident across the landscape of higher education. Specifically, recognizing the complexities inherent in thinking about how and why research is conducted, Boyer identified four types of scholarship to describe the research-based work of faculty in most colleges and universities. Three of these types of scholarship focus on works that have been central to the research endeavor for decades, if not centuries: the scholarship of discovery (identifying new knowledge to advance understanding), the scholarship of integration (making connections across disciplines), and the scholarship of application (using knowledge to address larger, societal problems). The fourth type of scholarship represented a new frontier, acknowledging classroom teaching as a context for systematic study and reflection. Boyer argued that the inclusion of the scholarship of teaching (now referred to as the scholarship of teaching and learning) was critical to build an academy that prioritized evidence-informed pedagogy as the primary building block for scholarly teaching.

Boyer's work served as a starting point for the scholarship of teaching and learning (SoTL) to be established as its own field of study, with scholars from across the globe representing myriad disciplines working together to study their teaching to better support student learning. Different groups and societies were formed to support this work and grow conversations about SoTL's positionality and value in higher education. Ironically, while Boyer was an audiologist, discussions about SoTL in communication sciences and disorders (CSD) have lagged behind other disciplines. While fields like sociology and history have adopted SoTL as a critical part of their disciplinary culture, creating peer-reviewed SoTL publications and establishing important recognitions and supports for SoTL scholars, conversations around SoTL in speech-language pathology and audiology were, for decades, grassroots efforts by advocates for evidence-informed teaching and learning that yielded very little integration of SoTL across disciplinary practices in CSD.

McKinney (2018) argued that integration of SoTL into a discipline allows for the sharing of essential evidence that, when applied well, creates opportunities for deep learning and – eventually – the emergence of effective, thoughtful professionals and citizens. If we view integration as the inclusion of SoTL *across* a discipline, McKinney's vision becomes clearer and can be directly applied to CSD. SoTL cannot be isolated in forums or groups to achieve meaningful disciplinary integration; rather, it must be attached to all conversations where teaching and learning in speech-language pathology and audiology are discussed. For that to happen in CSD, evidence about how students learn and how we can best teach needs to be interwoven into practices centered on accreditation, certification, professional development, student recruitment, student retention, and equity, diversity, inclusion, and access in all teaching and learning contexts. It must also be clear that SoTL and evidence-based education (EBE) are valued, supported, and honored by disciplinary leaders and influencers.

Ginsberg and colleagues (2017) acknowledged the fact that SoTL research is different from CSD's clinical and scientific research that represent Boyer's scholarships of discovery, integration, and application. For this reason, they suggested that SoTL may be judged by some in CSD to be less rigorous than traditional forms of disciplinary research. McKinney (2018) has argued that traditional disciplinary types of scholarship have historically been privileged in a manner that has impeded the integration of SoTL into sociology. This might also be the case in CSD as similar biases could create an inability to reach critical mass in the integration of SoTL into CSD.

Reflecting on the reasons scholars engage in SoTL or disciplinary research might be a pathway to reduce biases for or against any of Boyer's types of scholarship. SoTL is action, practitioner research that is conducted to address a need in a given teaching or learning context. The purpose of SoTL is the discovery of new knowledge about how to best support learners and instructors through evidence-informed practices (Felten, 2013; McKinney, 2007). Traditional disciplinary research is engaged in to serve a very different purpose – the discovery of new knowledge that advances an entire discipline. Outcomes of traditional disciplinary research in CSD leads to better understanding of ways of treating patients with speech, language, hearing, or swallowing disorders. In essence, SoTL supports the preparation of future speech-language pathologists and audiologists while traditional disciplinary research supports the actual practice of clinicians engaged in work with patients. For this reason, we argue that SoTL can exist in harmony with other types of scholarly activity in CSD to advance the discipline if these differences are recognized and understood.

Over the last decade, we have anecdotally observed that SoTL in CSD has enjoyed a period of growth and expansion, with greater interest in SoTL-focused professional development for academic and clinical faculty, the creation of a peer-reviewed journal to publish SoTL work, and the development of organized groups and activities to support evidence-informed ways of teaching and learning. These successes in integrating SoTL into CSD allow for expanded and important conversations about teaching and learning in speech-language pathology and audiology. Despite these gains, the exact nature of SoTL's integration into the academic and clinical practices of speech-language pathology and audiology have remained unclear. Thus, this paper reflects on the degree to which SoTL is integrated into CSD. Using a framework similar to McKinney's (2018), we first present perspectives and theories historically valued by our discipline and discuss how they apply to disciplinary perceptions of SoTL. Next, we provide a summary of existing supports for SoTL at various levels (i.e., individual teacher-scholars, departments, and institutions, and the CSD discipline as a whole), including awards and funding, outlets for dissemination, and organized groups and events focused on professional development. We then report how academic and clinical instructors are supported as scholarly teachers and SoTL scholars, based on a brief survey of CSD course instructors. Finally, we conclude with a call to action, based on opportunities we identify to advance the integration of SoTL into the fields of speech-language pathology and audiology.

This work is intended to inspire discipline-wide conversations about gaps, opportunities, and next steps for recognizing and supporting SoTL. Our intended audience is all speech-language pathologists and audiologists, including clinicians, researchers, and instructors, as each plays a part in supporting learners and advancing education in our discipline. It is important that diverse voices participate in these conversations. Thus, we invite those who are familiar with SoTL; those who are reading, sharing, and applying SoTL; and those who are conducting SoTL to engage in and amplify this conversation to extend the integration of SoTL in CSD.

### **Ways of Knowing in CSD**

McKinney (2018) described the concepts of *sociological imagination* and *ways of knowing* in SoTL in her discipline. While terminology may differ in CSD, this notion examines the extent to which the perspectives, theories, and methods of a discipline are applied to its views of SoTL.

Prior to the 1970s, college-level teaching was the primary responsibility of professors, though many faculty members came to their work in higher education with little formal training in pedagogy. After that decade, however, a shift occurred in many academic contexts, prioritizing research and funding over teaching for academic faculty, particularly for those working at research intensive institutions. As a result, doctoral training programs transitioned to focus heavily on research productivity and the acquisition of grant funding, with even less attention paid to training in teaching methods than had been in the past. Because of this, the lines between effective teaching and scholarly productivity began to blur causing some to question how stakeholders in higher education could continue to meet student and faculty needs in a time of shifting influences and priorities (Dorn, 2017). McCaughey (1994) reported that liberal arts professors held the belief that (scientific) research success translates into teaching success. Further, sixty percent of faculty interviewed for his study believed there was a significant, positive relationship between research success and teaching effectiveness. This belief almost exclusively implied that those engaged in the scholarship of discovery (basic or applied) would naturally be better teachers. One could argue that teaching has become increasingly complex and multifaceted since McCaughey's work was published.

If we follow Boyer's (1990) perspective on the value of different types of scholarship, SoTL should be held as integral to any discipline; however, the extent that is true in CSD is uncertain. To address this, it may help to clearly define the perspectives, theories, and methods of the discipline to bring clarity to any discussions about integration of SoTL in speech-language pathology and audiology. To follow McKinney's (2018) approach at understanding how SoTL was integrated into her home discipline of sociology, we attempt to identify the ways of knowing in CSD.

### **What are the perspectives and methods of the CSD discipline?**

**#1: Evidence is multi-factorial and is not solely defined by research.** Ginsberg and colleagues (2012) drew a clear parallel between the American Speech-Language-Hearing Association's (ASHA) evidence-based practice triad and a proposed evidence-based education triad. The evidence-based practice triad includes external scientific evidence (research evidence), clinical expertise/expert opinion, and the client/caregiver perspectives. Each is used to make clinical decisions when interacting with clients. A triad for supporting decision-making in teaching and learning contexts is similarly framed, with, evidence from SoTL corresponding or paralleling the external scientific evidence used in evidence-based practice, pedagogical content knowledge paralleling clinical expertise/expert opinions, and teacher-learner interactions corresponding to client/caregiver perspectives. Neither triad relies exclusively on research evidence as the sole consideration for decision-making.

**#2: Levels of evidence exist that can be differentiated in quality.** Across CSD, both quantitative and qualitative methods are used within disciplinary clinical and basic science research. The fact that ASHA ascribes to the research evidence pyramid described previously, holding experimental research as the highest in quality, implies qualitative research is valued differently than experimental research. In CSD, published SoTL work leans in that direction as well. In fact, most CSD SoTL work, whether quantitative or qualitative, is either descriptive or quasi-experimental.

In regard to clinical and basic science research evidence, ASHA (n.d.) regards systematic reviews and meta-analyses as the highest level of evidence, followed by randomized controlled trials, nonrandomized controlled trials, cohort studies, case series/case reports/single subject designs, and expert opinions (the lowest level of evidence). This hierarchy does not translate smoothly to SoTL, though the quality of evidence can be differentiated in SoTL research (Felten, 2013).

### **Differentiating quality of evidence in SoTL**

As acknowledged earlier, SoTL research differs fundamentally from clinical or basic science research in CSD so using the same metrics to gauge quality of evidence is problematic. We explore several considerations in support of this notion to identify the mismatch in how the quality of evidence is viewed in CSD versus in the broader field of SoTL.

**Bias.** An assumption of “levels of evidence” is that some study designs are more subject to bias than others, making their outcomes weaker than others. In SoTL, as most scholars are studying their own students to improve their own teaching practices, bias is inherent in most study designs. That said, it is a bias that the SoTL community acknowledges and accepts (McKinney, 2007; 2018). Bias is inherent in all research as ultimately, researchers themselves interpret the data and findings. It is traditional for qualitative researchers to include a statement to acknowledge their bias, a practice that perhaps quantitative researchers should also abide by.

**Randomization and controls.** While traditional disciplinary research in CSD values randomized controlled designs above all others, it is difficult for some to understand the reasons that these practices are troublesome in SoTL. Because all students deserve equitable instruction, true experimental randomization and control groups are rarely possible in SoTL studies. Likewise, waitlist groups are not possible because of curricular and time sensitive programmatic issues that would privilege some learners over others. Instead, in SoTL, instructors observe their own students and try to solve problems on a local level. This work is not intended, in most cases, to be generalizable but rather, to identify a solution to a problem that helps support improvements in teaching for individual instructors. Certainly, those findings have applications and meaning to instructors in similar contexts despite the fact that findings are not directly generalizable across contexts.

**Indications of rigor in CSD SoTL.** As other disciplines have demonstrated, quality in study design is possible in SoTL and is a priority in rigorous SoTL research. This begins with detailed descriptions of methods to increase replicability, bias checks such as member checking, and triangulation of multiple data sources, similar practices that are used in traditional disciplinary research. While SoTL publications in CSD have not adopted practices to enhance rigor that translational clinical research in CSD have begun to utilize, there is potential for such application in the future.

### **What are the theories of the CSD discipline?**

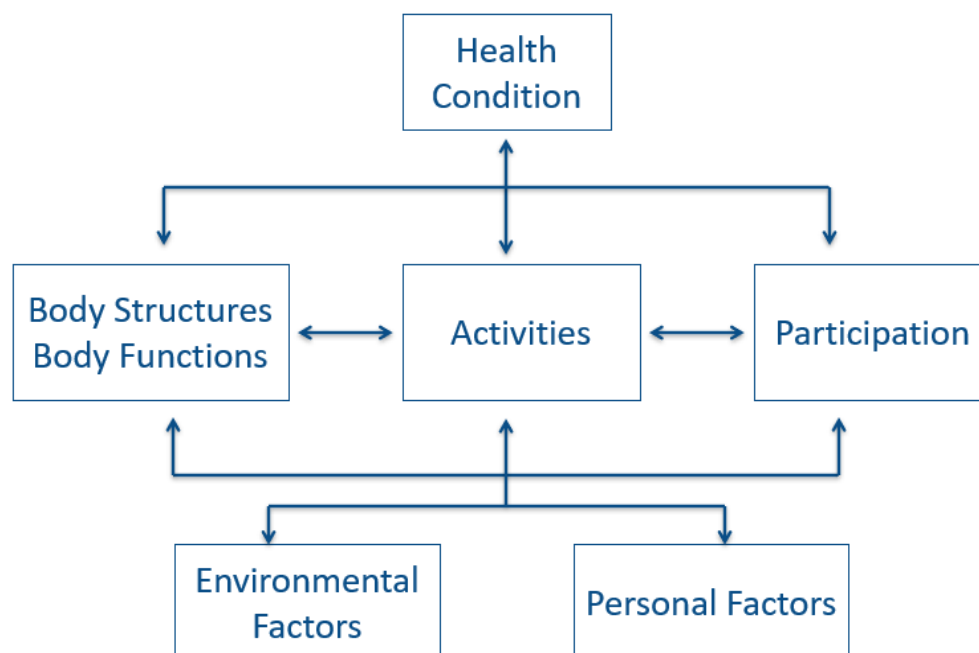
Over time, CSD’s clinical professions have observed a shift from an impairment-focused, medical model towards a person-centered, biopsychosocial model. This framework applies to both educational and clinical-medical contexts. The World Health Organization - International Classification of Functioning, Disability, and Health (WHO-ICF; World Health Organization, 2001) moves beyond bodily function and impairments to address what the person wants and needs

to do, in the context of the environment and personal factors. This framework values the individual and considers what supports or obstructs participation in meaningful life activities and communication. The focus is on the individual client and their everyday partners. See Figure 1 to observe the interaction between domains.

Education in CSD has experienced a similar shift in perspectives, from a one-size fits all form of instruction that was teacher-centric to a more responsive form of instruction that is tailored to a broader range of learners. Given recent increases in awareness and advocacy for more intentional approaches to address equity, diversity, inclusivity, and accessibility, learner-centered pedagogies have become a priority. These shifts parallel changes to clinical service provision as well. Instructors must be sensitive to factors that may marginalize students in the same manner that clinicians must be sensitive to factors that may restrict meaningful participation in communication contexts. Part of the intent is to amplify the voices of those who have been historically excluded and improve representation of the people we serve amongst our ranks. Figure 2 depicts interactions between declarative knowledge and skills, instructional approach, and learner engagement and preferences within the context of the learning environment and learner specific factors. Each of these domains parallel WHO-ICF (2001) domains. An expanded version of this framework is found in Figure 3, which defines each domain to demonstrate the complexity and interdependency of teachers and learners in the educational context, moving beyond isolated declarative knowledge and skills.

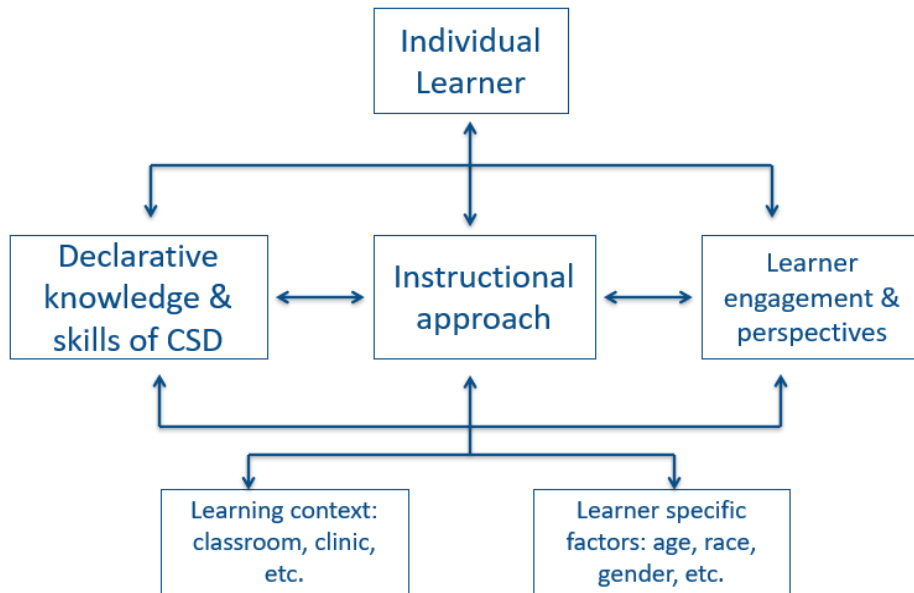
### Figure 1

*The WHO-ICF Framework*



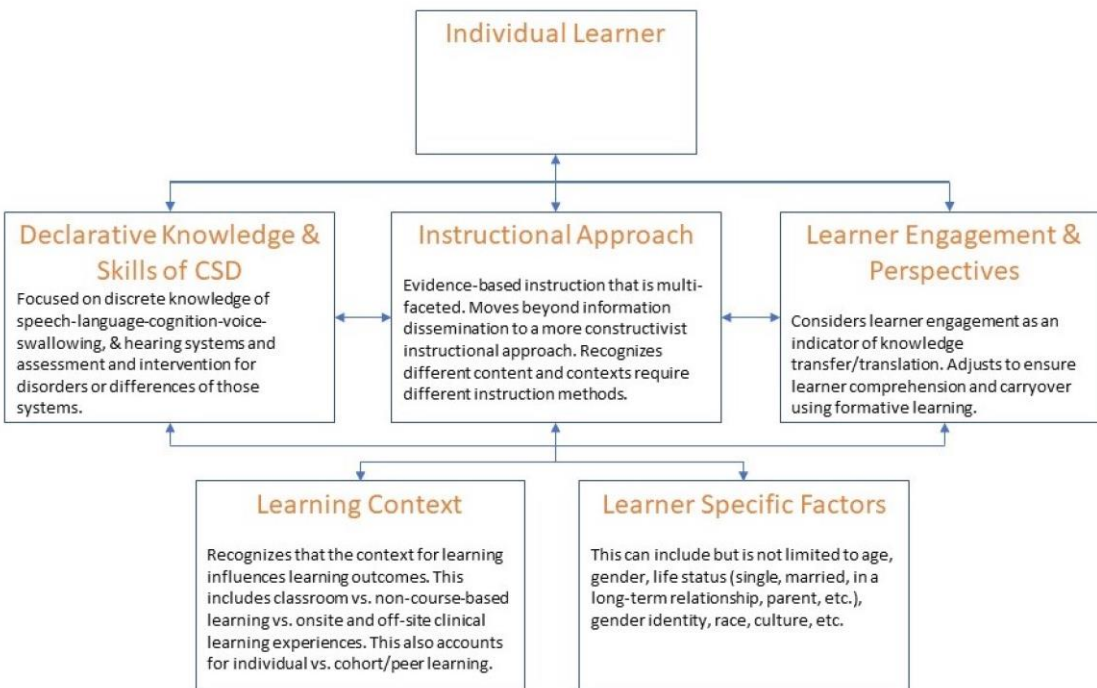
**Figure 2**

*A Holistic Framework for Teaching and Learning*



**Figure 3**

*Expanded Holistic Teaching and Learning Framework*



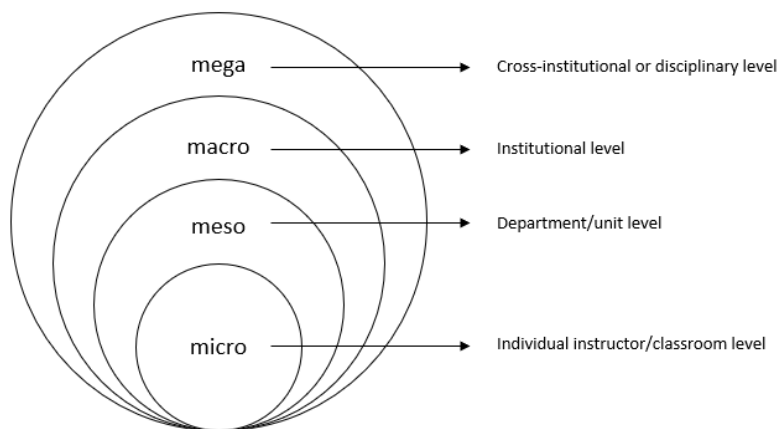


## Support for SoTL in CSD across Levels of Impact

Recognizing that the perspectives, methods, and theories valued in our discipline shape our views of SoTL, it is important that we consider how SoTL is currently supported—and perhaps not supported—in CSD. Recently, the broader, cross-disciplinary field of SoTL has used what some term the “4M Framework” to discuss specific levels of impact that SoTL might have within and across institutions and disciplines. The 4M Framework, first described by Weston and colleagues (2008) and expanded by Simmons (2009), characterizes SoTL work as occurring in and having impacts at four distinct levels: micro (individual/classroom), meso (department/program), macro (institution), and mega (cross-institutional/disciplinary). Thus, micro level SoTL might describe outcomes of individual SoTL projects that inform changes to teaching in support of student learning. Meso level SoTL might examine a program’s curriculum as a process of continuous quality improvement. Macro level SoTL might study students across an institution to better understand the strengths and weaknesses of a shared experience (e.g., general education coursework). Finally, mega-level SoTL might engage scholars at four different university speech-language pathology (SLP) programs who teach similar content and wish to study a similar question about their students’ learning. Figure 4 illustrates the interactions across the 4M levels of impact.

### Figure 4

#### *The 4M Framework*



*Note.* From Frake-Mistak and colleagues (in press)

Thus, the 4M Framework represents a fixed idea of where SoTL might be positioned and the depth of impact SoTL work might have, based on where the SoTL is conducted or applied. We have identified supports for SoTL in CSD at the mega, macro, and meso levels using this framework, recognizing that it is at these levels where systematic supports for SoTL are developed and sustained.

**Support for SoTL at the Mega (Discipline) Level.** Within CSD, there are various disciplinary supports for SoTL, including official statements, funding and awards, outlets for making SoTL public, professional development opportunities, and organized groups. Over a decade ago, the

Council on Academic Programs in Communication Sciences and Disorders (CAPCSD) published a SoTL-specific statement, their *Position Paper on the Scholarship of Teaching and Learning in Communication Sciences and Disorders*, which is currently in the process of update and revision (CAPCSD, n. d.). While we are unaware of SoTL-specific travel and/or research funding mechanisms in our discipline, some awards sponsored by ASHA, the ASHFoundation, and CAPCSD occasionally provide funding for SoTL work. For example, ASHA's Academic & Research Mentoring (ARM) Network sponsors 10 awards. The purpose of two of these awards (i.e., the Advancing Academic-Research Careers [AARC] award and the Students Preparing for Academic Research Careers [SPARC] award) explicitly mention SoTL in the award description. Some, but not all, recipients of ASHA awards like Honors of the Association, Fellowship of the Association, and Certificate of Recognition for Special Contributions in Higher Education, engage in SoTL work. Thus, these awards occasionally, but not exclusively, support or recognize SoTL in the discipline.

The first CSD-based SoTL publication was published in *the International Journal of Speech-Language Pathology* in 2009 (DeRuiter et al., 2018; Friberg et al., 2019a). By 2016, a total of 45 SoTL-related publications appeared in seven CSD journals, including *Contemporary Issues in Communication Sciences and Disorders (CICSD)*, *Perspectives of the ASHA Special Interest Groups*, the *American Journal of Audiology (AJA)*, and the *American Journal of Speech-Language Pathology (AJSLP)* representing .02% of works published in disciplinary journals in that time frame. *CICSD* published 10 of those articles between 2010 and 2016, when the journal was sunset. *Teaching and Learning in Communication Sciences & Disorders (TLCSD)* was established in 2017, creating a SoTL-specific outlet for publication. Since 2017, a total of 119 articles (with 284 unique authors representing 97 institutions and five countries) have been published in *TLCSD*, which more than doubled the existing CSD SoTL evidence base. *TLCSD* has also created three SoTL-specific awards: the *TLCSD High Quality SoTL Research in CSD Award*; the *TLCSD Excellence in Peer Review Award*; and the *TLCSD SoTL Fellowship* program. These supports are listed in Table 1 and are grouped by those that are SoTL-specific and examples that while not SoTL-specific, provide some, inconsistent, or non-exclusive support for SoTL.

In the last five years, the number of SoTL-specific professional development opportunities in the discipline has risen steadily to include a teaching symposium, faculty development institutes, and research round tables at the ASHA convention. A SoTL-specific convention topic area existed briefly a decade ago but was absorbed into the Models of Academic and Clinical Education (MACE) topic area the following year. Anecdotally, we have observed growth in the number of SoTL presentations at the annual ASHA convention and CAPCSD conference, as well as increased attendee participation in these presentations over the last five years. Finally, while there are no formal, SoTL-specific organized groups within the discipline, conversations about SoTL are ongoing within ASHA Special Interest Groups (SIG), namely SIG 10: Issues in Higher Education and SIG 11: Administration and Supervision.

**Table 1**

*Existing Disciplinary Supports for SoTL in CSD*

Type of Support	Disciplinary Examples	
	SoTL-Specific	Not SoTL-Specific
Official Statements	CAPCSD Position Paper	
Funding		ASHFoundation CAPCSD
Awards	<i>TLCSD</i> High Quality SoTL Research in CSD Award <i>TLCSD</i> Excellence in Peer Review Award <i>TLCSD</i> SoTL Fellowship Program	Advancing Academic-Research Careers (AARC) Award Students Preparing for Academic Research Careers (SPARC) Award ASHA Honors of the Association, Fellowship of the Association, Certificate of Recognition for Special Contributions in Higher Education, etc.
Outlets for making SoTL public	<i>TLCSD</i>	ASHA Journals: <i>Perspectives</i> <i>AJA</i> , <i>AJSLP</i> <i>CICSD</i> *
Professional development opportunities	ASHA Teaching Symposium on Foundational CSD Science Courses & Learning Communities (2021-22) ASHA Faculty Development Institute (2021) ASHA Convention Research Round Tables (2018, 2019)	ASHA Convention CAPCSD Conference
Organized groups		ASHA SIG 10 ASHA SIG 11

*Note.* \*CICSD was sunset in 2016.

Although there are a plethora of cross-disciplinary teaching and learning resources available to instructors, a few notable CSD-specific examples include two texts, *Scholarship of Teaching and Learning in Speech-Language Pathology and Audiology: Evidence-Based Education* (Ginsberg et al., 2012) and *Evidence-Based Education in the Classroom: Examples from Clinical Disciplines* (Friberg et al., 2021), in addition to a webinar series, Addressing Racism in CSD Education, which was sponsored by *TLCSD* in 2020. Additionally, by the end of 2022, it is anticipated that a digital library focused on culturally responsive teaching will be published by ASHA. This project, a collaboration between ASHA's Academic Affairs Board, SIG 10, SIG 11, and SIG 14 (Cultural and Linguistic Diversity), will feature resources – including SoTL work – in support of evidence-informed, equitable pedagogies.

We recognize that SoTL is more fully integrated in some areas of CSD than others. SoTL scholars in CSD disproportionately represent speech-language pathology, which has led to many more publications and presentations in speech-language pathology than in audiology. That said, contrasts in SoTL's level of integration within speech-language pathology is evident in its subdisciplines. For instance, in the realm of aphasia care, some organizations have made inroads to SoTL. While not directly linked to SoTL, the Tavistock Trust for Aphasia (TTA) specifically identifies teaching and mentoring students as one of the criteria for the TTA Distinguished Scholar award, along with research and clinical contributions. Aphasia Access, an organization focused on improving life participation for people with aphasia, has a working group that develops educational modules and curricular resources that adhere to evidence-based education principles, in consultation with SoTL researchers. Further, Aphasia Access leadership secured a special issue of SIG 2 Perspectives, which included a review of SoTL research specific to aphasia education and clinical training (Hoepner & Sather, 2020). Similarly, the International Cognitive Communication Disorders Conference (ICCDC), a consortium of clinical researchers and clinicians focused on translational clinical research for persons with cognitive communication disorders (CCD). One topic of this biennial conference is improving evidence-based instruction for CCD. A special issue of *AJSLP* is published each conference year, dedicated to research shared at ICCDC, which typically includes at least one paper on evidence-based instruction and curricular issues (e.g., Morrow et al., 2021).

In contrast, SoTL is far less integrated in the subdiscipline of augmentative and alternative communication (AAC). Despite the publication of multiple studies that explored the availability of AAC coursework and clinical experiences for students in the United States over the last three decades, very few AAC-related SoTL works have been published in CSD disciplinary journals or *Augmentative and Alternative Communication*. In addition, we are unaware of any SoTL-specific funding opportunities or awards related to AAC. Within organized groups such as ASHA SIG 12: AAC, the United States Society for Augmentative and Alternative Communication, and the International Society for Augmentative and Alternative Communication, SoTL-specific conversations and professional development opportunities are lacking. Similarly, there is much more SoTL resulting from studies of classroom pedagogy. CSD, being a clinical discipline, needs to also foster the engagement of clinical faculty in SoTL studies to better understand the needs of teachers and learners in clinical teaching contexts. From on-campus clinics to off-campus placements, contexts outside of the traditional classroom setting need to be better represented in CSD's approaches and supports for SoTL.

**SoTL Stakeholder Survey.** We conducted a survey to better understand how support for SoTL was provided for academic and clinical course instructors in speech-language pathology and audiology in their respective programs and institutions. The survey replicated a past, similar effort (Friberg et al., 2019b) and contained five questions in total (see Appendix A), with two collecting demographic information and three gauging how SoTL is supported, accessed, and applied in CSD. A link to the survey was distributed through a recruitment email to program directors of all audiology and speech-language pathology programs accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology. In sum, 120 individuals responded to the survey. Individuals from both audiology ( $n = 18$ ) and speech-language pathology ( $n = 102$ ) were represented in the participant group, with campus roles including the following: assistant professor ( $n = 25$ ), associate professor ( $n = 37$ ), full professor ( $n = 20$ ), clinical educator ( $n = 26$ ), non-tenure track/adjunct instructor ( $n = 7$ ), department chair/program director ( $n = 1$ ), and other ( $n = 4$ ). Additional data was collected to reflect different ways in which SoTL has been integrated into CSD to support the preparation of future scholars and clinicians. In alignment with our institutions' expectations, this survey received IRB approval.

Survey respondents were asked to identify available supports and resources for SoTL across the discipline of CSD (mega level), as well as in the more local contexts of their own CSD programs (*meso* level) and institutions (*macro* level). Possible supports for SoTL in these three contexts included financial supports (e.g., grants, travel funding), static resources (e.g., access to publications centered on teaching and learning), interactive opportunities (e.g., mentorship, professional development), and awards or recognition for SoTL work. Table 2 reports survey respondents' awareness of existing disciplinary supports captured in Table 1. Note that data reflecting the meso and macro levels will be discussed in the next section of this paper.

**Table 2**

*Sources of Disciplinary Support for SoTL in CSD\**

Support type	Provided by the discipline (e.g., ASHA, CAPCSD) (Mega)	
	<i>n</i>	%
Funding to present SoTL outcomes	12	10.0
Grants	34	28.3
Access to books/journals focused on teaching and learning	54	45.0
Professional development for scholarly teaching/SoTL	56	46.7
Mentorship	41	34.2
Awards/recognitions	25	20.8

*Note.* \* $n = 120$  for all respondents

Just over half of survey respondents indicated that they were aware of published works or professional development for scholarly teaching and/or SoTL provided by disciplinary groups such as ASHA or CAPCSD. Fewer respondents knew of mentoring programs for those engaged in SoTL or awards/recognitions for SoTL scholars. Of the areas of support that are available at the mega level, respondents indicated the least awareness of where financial supports for SoTL scholars might exist. Across these categories, the evident, general lack of awareness about disciplinary supports for SoTL might exist due to the lack of explicit mention of SoTL as the explicit focus of these supports. For instance, SoTL scholars in CSD can apply for an AARC award through ASHA; however, SoTL is not in the award title or description, potentially leaving applicants unsure of whether the AARC award might be a support for SoTL work.

**Support for SoTL at the Macro (Institution) and Meso (Department/Program) Levels.** For SoTL to be integrated into a discipline, it must be produced, applied, and supported, not just within the discipline itself, but within institutions, departments, and programs as well. We recognize that there is tremendous variance across institutions and programs, in terms of the types of SoTL supports that might be in place; however, it is important to identify broad trends across these more local contexts to truly understand the integration of SoTL in CSD. To that end, additional results from the stakeholder survey provided information about the types of SoTL supports available to respondents within their own programs and institutions (refer to Table 3).

**Table 3**

*Sources of Programmatic and Institutional Support for SoTL in CSD\**

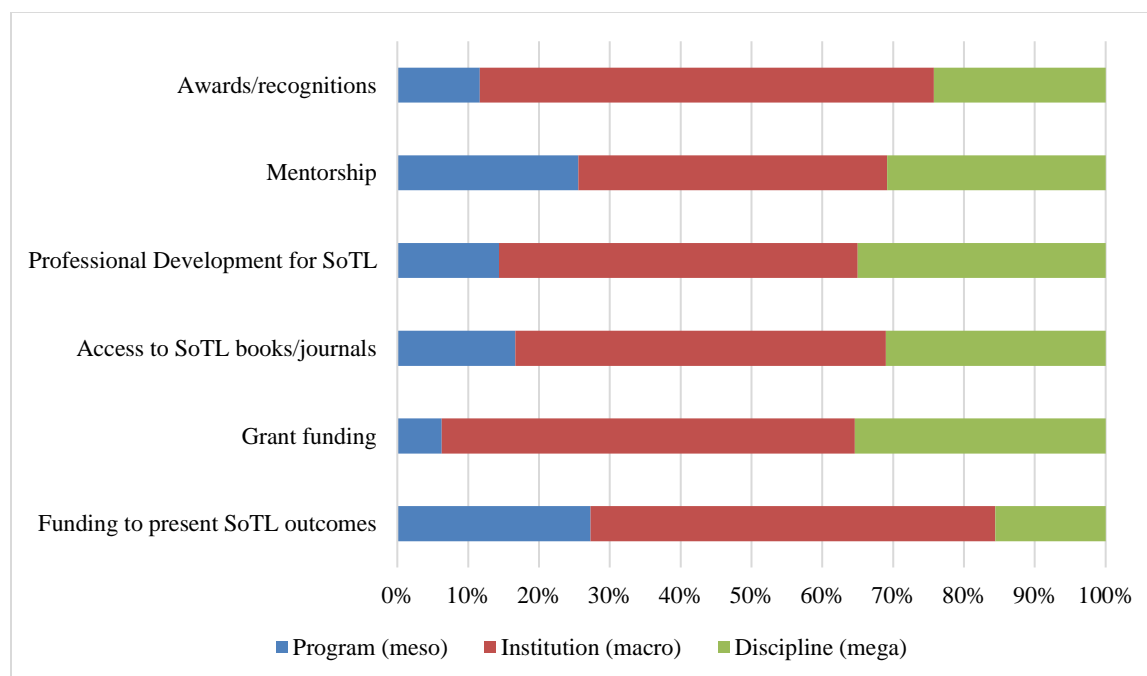
Support type	Provided within my own CSD program ( <i>Meso</i> )		Provided by my institution (e.g., teaching/learning center) ( <i>Macro</i> )	
	<i>n</i>	%	<i>n</i>	%
Funding to present SoTL outcomes	21	17.5	44	36.7
Grants	6	0.05	56	46.7
Access to books/journals focused on teaching and learning	29	24.2	91	75.8
Professional development for scholarly teaching/SoTL	23	19.1	81	67.5
Mentorship	34	28.3	58	48.3
Awards/ recognitions	12	0.10	66	55.0

*Note.* \*Total *n* = 120 for all respondents

Across mega, macro, and meso levels of impact, survey results suggest that the highest level of support for SoTL in CSD is currently derived at the institutional level (*macro*), with teaching and learning centers, research offices, libraries, and other campus units providing formal professional development related to scholarly teaching/learning and/or SoTL as well as books and journal subscriptions where SoTL can be accessed (See Figure 5). Survey respondents also identified their own institutions as the most frequent source for grants, awards/recognitions, mentorship, and travel funding. Individual CSD programs were reported to provide the fewest supports for SoTL, though funding to present SoTL was reported as being more frequently provided by individual programs than from any disciplinary sources.

**Figure 5**

*Distribution of SoTL Supports Across Meso, Macro, and Mega Levels of Impact*



**Support for SoTL at the Micro (individual) Level**

**Resources.** Survey respondents were asked to indicate the types of resources that they access to support the use of evidence for their teaching practices and could choose one or more from a list provided to them. The most highly accessible resources indicated by respondents included professional development focused on teaching and learning, followed by peer-reviewed articles focused on SoTL. When respondents indicated “other,” the resources that were mentioned included discussions with colleagues, university teaching and learning centers, specific podcasts (i.e., *Teaching in Higher Ed*; Stachowiak, 2014-present), and university teaching and learning centers. The list of resources is included in Table 4.

**Table 4***SoTL Resources Accessed by Survey Respondents\**

SoTL Resource	<i>n</i>	%
Peer-reviewed article focused on teaching and learning in a <i>disciplinary</i> research journal	89	74.2
Peer-reviewed article focused on teaching and learning in <i>cross-disciplinary</i> research journal	69	57.5
Book focused on research on teaching and learning	67	55.8
Professional development focused on teaching and learning (e.g., conference presentations, workshops)	106	88.3
Social media accounts focused on teaching and learning	43	35.8
Blogs topical to teaching and learning	27	22.5
Website topical to teaching and learning	61	50.8
Other	10	8.3
None	4	3.3

*Note.* \**n* = 120 respondents

These data would indicate that respondents are reliant on conferences and workshops to support their learning about SoTL. In this survey, the source of these professional development opportunities was not specified, it could be inferred that these opportunities are likely at the macro (institutional) or mega (discipline) level. Collectively, the next most frequent resource accessed were from peer-reviewed articles, indicating that respondents are turning to the evidence for specific practices in order to inform their teaching and learning efforts.

**Engagement with SoTL (micro).** To better understand how SoTL was being utilized by individual instructors as a part of their own professional development, course design, and/or scholarly productivity, survey respondents were asked to select from a list of practices that describe their level of engagement with SoTL. Engagement in SoTL was envisioned in a continuum from no engagement with SoTL; to reading SoTL; to sharing SoTL; to actually conducting SoTL studies. Respondents were asked to select all answers that best applied to their own engagement with SoTL. See Table 5 for results of this query.



**Table 5***Survey respondents' self-described engagement with SoTL Supports\**

Level of engagement in SoTL**	<i>n</i>	%
I have no engagement with SoTL.	1	.83
I occasionally read/access research on teaching and learning.	48	48.3
I regularly read/access research on teaching and learning.	46	38.3
I share research on teaching and learning with colleagues and students.	46	38.3
I use research on teaching and learning to inform my teaching.	80	66.6
I have conducted a study focused on teaching and/or learning.	38	31.7

*Note.* \**n* = 120 respondents \*\*respondents could choose more than one option

These data would suggest that there was widespread engagement with SoTL in some manner across survey respondents. Engagement ranged from reading SoTL to sharing SoTL to doing SoTL. The vast majority of survey respondents reported reading/accessing SoTL at least occasionally with two-thirds of respondents actively using SoTL to inform their teaching. Close to one-third of respondents reported conducting a SoTL study of their own.

### Strategies and Further Conversations

This manuscript has identified the ideas and supports that are currently present to support SoTL in CSD, demonstrating ways in which SoTL has become successfully integrated into varied spaces in speech-language pathology and audiology. In doing so, we summarized how disciplinary ways of knowing, research methods, and theories influence SoTL. Additionally, we have reported ways in which various stakeholders in CSD are engaging with and/or applying SoTL as teachers and scholars in higher education. We argue that this work could be considered a form of reflective self-study about SoTL in CSD that *allows* a broad and deep look at ways in which our discipline might expand how SoTL is integrated into our practices – both pedagogically and scholarly – in higher education. Specifically, we have identified four primary areas where strategic action might effectively advance the integration of SoTL in CSD. Our recommendations are explored below and can also be found as a summary list in Appendix B.

**Increased awareness of SoTL and its value to the discipline.** To further integrate SoTL into the discipline of CSD, expanding in the number of individuals who are aware of and who understand SoTL and its value may well be necessary. As we have identified above, there have been successful grass-roots efforts in CSD to grow SoTL and support initiatives that have expanded exposure to SoTL for those in higher education. We propose that a disciplinary culture change might be necessary for CSD to truly embrace SoTL as a practice with merit and value in speech-language pathology and audiology.

This culture shift might start with the examination of how we, as stakeholders in higher education spaces in CSD, problematize teaching issues that arise in our classrooms and clinical contexts. Bass (1999) suggested the following as SoTL emerged over two decades ago as a new field of study, understanding that a change in how discussions related to teaching and learning are framed might be necessary:

In scholarship and research, having a ‘problem’ is at the heart of the investigative process; it is the compound of the generative questions around which all creative and productive activity revolves. But in one’s teaching, a ‘problem’ is something you don’t want to have, and if you have one, you probably want to fix it. Asking a colleague about a problem in [their] research is an invitation; asking about a problem in one’s teaching would probably seem like an accusation. Changing the status of the problem in teaching from terminal remediation to ongoing investigation is precisely what the movement for a scholarship of teaching is all about. How might we make the problematization of teaching a matter of regular communal discourse? How might we think of teaching practice, and the evidence of student learning, as problems to be investigated, analyzed, represented, and debated? (p. 1)

If we, across CSD, adopt this way of thinking and truly consider the discussion and study of teaching and learning problems as being as important as the discussion and study of our research problems, we might then begin to cultivate regular, meaningful, and intellectual conversations about teaching and learning to advance our evidence-based educational practices and further integrate SoTL into our discipline.

It is critical that conversations about teaching and learning in CSD represent the content, perspectives, and needs of both audiology and speech-language pathology. To date, there are few SoTL studies that have been published that reflect solely the teaching and learning of audiology-based content or practices. The vast majority of SoTL published in CSD has focused on speech-language pathology. Some might argue that this is not terribly problematic. Both audiology and speech-language pathology are clinical fields tied directly to the identification and treatment of communication disorders. That said, we believe that there is important nuance that makes aspects of teaching and learning in audiology very different than is the case for speech-language pathology. Audiology faculty might wish to study the most effective ways to teach vestibular rehabilitation – content that is not a part of most speech-language pathology curricula. There are myriad, similar areas of practice that could be studied to establish a strong evidence-base for teaching and learning in audiology.

An additional culture change may be necessary to recognize that SoTL research differs from CSD clinical or basic science research in regard to bias, randomization, controls, and measures of quality. The ways in which we design studies to better understand speech, language, and/or hearing have specific methodologies that support the discovery of new disciplinary knowledge. Similarly, the methods used in SoTL allow for similar discovery, but for a much different purpose. Elman (2022) urges that across all research in CSD, scholars should “focus on doing outstanding research, no matter the kind” (p. 6) in an effort to infuse diverse research methods, designs, and perspectives into CSD. We strongly advocate for outstanding and rigorous scholarship that supports EBP and

EBE alike, and believe that there may be ways to align some SoTL work with existing frameworks from disciplinary scholarship.

Specifically, we suggest that important differences be acknowledged between SoTL and other CSD research and that, perhaps, SoTL scholars look towards recent developments in translational clinical research for examples of how perceptions of and practices that support increased rigor of SoTL might be elevated. While these may not be a perfect fit for SoTL, they are worth considering and potentially adapting. Quality design checklists such as the Consolidated Criteria for Reporting Qualitative Research (COREQ) ensure more systematic design and reporting (Tong et al., 2007). This 32-item checklist includes detailed information about the researcher(s), the participants, and design. Many disciplinary CSD journals require the use of the COREQ checklist for qualitative research submissions. Similarly, the Template for Intervention Description and Replication (TIDieR) provides a checklist for design and replication of quantitative intervention research that may have relevance to instructional intervention SoTL design (Hoffmann et al., 2014). The Risk of Bias in N-of-1 Trials (RoBiNT), while not a fit for all SoTL designs, also warrants consideration, particularly for small N clinical supervision research (Tate et al., 2015). Increased systematicity and consistency can also improve the rigor of SoTL reflections. Reflections should address implications in one's own teaching including changes in students and classroom, reflect on patterns across cases or current research, be relevant to current issues in the field, address the broader theoretical frame, and raise questions that still need to be addressed (Ballenger et al., 2006).

**Support for those engaged in SoTL across the academic lifespan.** We have summarized various disciplinary supports for SoTL as well as more variable supports at the institution, department, and program levels for SoTL scholars. We argue that increased, consistent support is needed across each level of impact for individuals engaged in SoTL across the academic lifespan, from doctoral students to academic and clinical faculty at various stages of their careers.

First, we are unaware of any dedicated, disciplinary SoTL-specific funding for research or travel. Responses from our survey participants reflect this, as few individuals reported disciplinary funding to support their SoTL work. This lack of funding presents a barrier for SoTL scholars and for those interested in beginning (or continuing) a SoTL research agenda. Without financial support for SoTL in terms of conducting, presenting, and publishing that work, SoTL projects may inadvertently take a backseat to other, more traditionally valued, research that tends to enjoy a consistent funding mechanism for scholars. Therefore, there is an important need for funding from ASHA, CAPCSD, and sub-disciplinary groups, as well as institutions and departments to provide funding for those engaged in SoTL.

We also argue there is a need for planned and consistent professional development for evidence-based teaching and learning at the disciplinary level, beginning within doctoral preparation. As future educators and researchers in the field, it is important that these students learn to access, apply, and engage in SoTL during mentored teaching experiences as part of their doctoral programs. Responses from our survey participants indicate that they do have access to professional development about SoTL, but not consistently across contexts. Regularly offered educational development opportunities in CSD could attract new scholars to SoTL as a resource for EBE and support both novices and experts who choose to engage in SoTL. The ASHA Teaching Symposium

on Foundational CSD Science Courses & Learning Communities and the ASHA Faculty Development Institute are recent examples of such opportunities that support scholars at various stages of their SoTL work and grow the disciplinary offerings available to SoTL scholars in CSD. We suggest that the expansion of these types of programs will create planned and consistent SoTL-specific learning opportunities at disciplinary and sub-disciplinary conferences. Further, in order to increase the visibility of SoTL in CSD, this form of scholarship should be highlighted where appropriate, perhaps through the reinstatement of the SoTL topic strand at ASHA's annual conference, the explicit inclusion of SoTL topics at research round tables, and the addition of town hall meetings and other opportunities for networking and conversations among those interested in and/or engaging in SoTL.

Since its inception, *TLCSD* has provided an outlet for SoTL work for both student and faculty contributors, has developed formal and informal mentorship opportunities for emergent SoTL scholars, and has presented awards that recognize and support SoTL scholars and peer reviewers. To build on this momentum, we recognize the need for more organized groups and formal mentorship structures to emerge with a focus on SoTL in CSD. Other disciplines have established societies or associations focused exclusively on SoTL that promote networking, mentorship, and advocacy. These groups are likely to benefit all involved but could be particularly useful for new SoTL scholars and for those in CSD sub-disciplines with fewer mentors and/or SoTL conversations.

**Application of SoTL to support students as learners.** Ginsberg et al (2012) first connected SoTL in CSD with the disciplinary norm of evidence-based practice, arguing that the application of knowledge garnered from SoTL allows for evidence-based educational practices that maximize student learning. Thus, from the first conversations about SoTL in CSD, there has been a strong mandate to connect this work to the pre-professional preparation of our students. At the micro level, individual SoTL scholars may well apply the outcomes of their SoTL studies to improve their courses for their students. However, it is not only those doing SoTL who can use SoTL to support student learning and success.

The application of SoTL in micro-level contexts underscores the notion that while not all stakeholders in higher education need to produce SoTL, it is important they know how to consume and apply the work of others to develop and deliver learning experiences that are informed by evidence of pedagogical effectiveness. Much as clinicians in audiology and speech-language pathology use evidence-based practice to guide their clinical work, we support the initial call from Ginsberg and colleagues (2012) and most recently, Friberg and colleagues (2021) to use evidence from SoTL to inform a scholarly approach to teaching and learning. Individuals teaching in academic or clinical contexts have a wide array of extant literature in CSD and other clinical fields that can serve as a foundation for making informed decisions about course design and delivery. More broadly, we argue that discussions about how SoTL can best be applied to the unique teaching and learning contexts of CSD should be valued as important disciplinary conversations, thus moving micro impacts of SoTL to broader, macro- or mega-level groups of stakeholders.

In further support of examining SoTL's applications beyond individual teachers and classrooms, McKinney and colleagues (2019) suggested that conducting and using SoTL that moves beyond the micro level is important for greater impact of SoTL on institutional and disciplinary cultures.

Further, they noted that SoTL work that can be viewed through meso, macro, and mega lenses has the potential to expand evidence-based educational practices beyond the local context, in a manner that could become integrated into disciplinary ways of thinking about common teaching and learning problems across higher education. This argument highlights a void in CSD's current thinking about how to best prepare students as future scholars and clinicians. Many disciplines have what are termed *signature pedagogies*; established methods of fostering student learning that are discipline-specific (Gurung et al., 2008). Brackenbury et al. (2014) proposed a path forward towards a practice-focused signature pedagogy for CSD almost a decade ago, and while we fully support each of the recommendations suggested by these authors, ideas about what a signature pedagogy might be in CSD needs updating. The paper in question was published pre-pandemic, before technology was widely used to support learning (e.g., simulation, telepractice, distance learning), and prior to discussions about equity, diversity, inclusion, and access being central to broader disciplinary conversations. A fulsome, contemporary signature pedagogy for CSD would need to include mention of these and other issues and be anchored in evidence-informed educational practices.

Beyond the need to develop a signature pedagogy for CSD, there are other examples of emerging work in the macro context that – applied consistently – have the capacity to change how we think about our disciplinary practices and processes. One example of such work centers on transforming graduate admissions practices. Over the past 10 years, the dearth of diversity in multiple dimensions within CSD has been a topic of discussion and concern, but has lacked action to resolve these concerns (Mandulak, 2021; Thompson, 2013). Holistic review for graduate admissions has been championed by multiple adjacent health professions, including medicine, nursing, pharmacy, and dental education, with an evidence base expanding to include outcomes such as increases in diversity within incoming student cohorts without changes in student outcome measures (e.g., Drees et al., 2014; Price & Grant-Mills, 2010; Price et al., 2008). There has been a burgeoning interest in applying these admissions practices within CSD in order to broaden the criteria for acceptance and therefore, create more equitable and inclusive processes that will “facilitate changes in a workforce that more closely reflects the world in which we live and the populations we serve” (Mandulak, 2021, p. 480). With the advent of more CSD programs embracing holistic review practices for graduate admissions (Guiberson & Vigil, 2021; Mandulak, 2021; Scheer-Cohen et al., 2020; Wong et al., 2021), it is likely that the diversity of incoming student cohorts is increasing in many different ways, including minoritized students who have historically been excluded from the field (e.g., first generation students and neurodivergent students). Knowledge and skills to use more inclusive classroom practices, and the evidence to support those practices, will be needed for instructors to support a wide range of diverse learners on multiple dimensions. SoTL has allowed stakeholders in CSD to study and integrate more equitable admissions practices and can similarly support how we address other problems that directly impact students and the relevance of our discipline, going forward.

**Student engagement as SoTL scholars.** SoTL research inherently centers and values the student experience, as students are studied in SoTL to better understand what supports their learning. As SoTL has increased in stature in CSD, a growing number of CSD students have served as participants in SoTL studies and data collected from those students have helped to inform best practices for clinical and theoretical teaching and learning in speech-language pathology and audiology. While student engagement as participants in SoTL is inherent to this type of

scholarship, we argue that the integration of SoTL into CSD would be markedly more notable if students' voices were truly a part of this discipline's discussions about teaching and learning as our partners in scholarship.

Echoing and expanding on the deep practice of engaging students as partners in the broad, cross-disciplinary field of SoTL (Cook-Sather et al., 2014; Felten, 2013; McKinney, 2007; Werder & Otis, 2010), Maurer and colleagues (2021) described SoTL as community property that should be co-created and co-constructed between teachers and learners. They describe a specific practice, knowledge mobilization, where SoTL can be shared, translated, or co-created with students as partners in regular and meaningful ways. The different acts suggested by Maurer et al. provide a foundation to build upon in CSD.

***Sharing and translation of SoTL.*** Student engagement in SoTL could be viewed as a mechanism of consuming SoTL to bolster student success. Ironically, many SoTL studies are conducted with students as participants, yet they are never directly informed about the outcomes of the studies they are a part of. Consideration amongst SoTL scholars in CSD should turn to how this loop can be closed to allow students to understand what was learned via SoTL and what aspects of a course are changed because of their contributions to research. Additionally, it is important to envision methods and techniques instructors might utilize to routinely translate SoTL work to students. Scholars such as Dunlosky and colleagues (2013) identified high versus low utility study strategies used by students. Shouldn't work such as that be shared with students in a manner that might directly impact their success? The term "scholarly teaching" is frequently used in conversations about pedagogy. Knowledge mobilization through processes such as those described here allow for scholarly *learning* through engagement in SoTL.

***Students as SoTL scholars.*** Students can also engage directly as SoTL scholars by working with peers or faculty to engage in research focused on teaching and learning. Often, students seek out mentored research experiences as a part of their CSD experiences. Such opportunities can be offered via SoTL as well as through traditional, disciplinary research experiences. Students can engage in a part of a study conducted by CSD faculty (see Arzbecker, et al., 2018) or conduct a study on their own (see Leatherman & Pedersen, 2022). Research experiences of any kind are valuable for students (Kuh, 2008; Lanning & Brown, 2019) and we would argue that with increases that we have witnessed in the number of CSD stakeholders engaged in SoTL, that seeing a corresponding increase in student engagement in SoTL would be a worthy aspiration for our discipline.

### **Looking Forward: Advocacy for SoTL in CSD across the 4Ms**

We view our suggestions above – to increase awareness of SoTL, to expand the application of SoTL, to provide support for teacher-scholars, and to actively involve students in SoTL as next and important steps to more deeply integrate SoTL into CSD. Some might view these suggestions as specific, individual pathways towards integration, and that may well be true. However, we feel that our true call to action across these recommendations is grounded in the need for SoTL scholars, scholarly teachers, scholarly learners, and those who support evidence-based education to engage in conversations about SoTL as true advocates for this type of work.

Friberg (2021) defined SoTL advocacy as purposeful action based on one's own contextual knowledge to advance the understanding for and engagement in SoTL. Each of the areas of focus we suggested above to better integrate SoTL into CSD depend on individual and larger group engagement in strategic, planned actions to raise awareness of SoTL and its potential contributions to CSD across micro, meso, macro, and mega levels of impact. Building awareness of SoTL for varied stakeholders in CSD will require consideration of appropriate audiences and work to craft specific messaging and solicit sponsorship from disciplinary groups and organizations. The path towards supporting SoTL scholars in their work necessitates targeted advocacy for funding, mentorship, and the establishment of robust SoTL-specific educational development as part of our discipline's continuing education offerings. Evidence-based education across CSD cannot be championed without individuals and groups creating opportunities for discussion about and sharing of peer-reviewed work in teaching and learning.

We believe that we have observed growth in SoTL in CSD in the last decade. Much of that growth is due to the dedicated efforts of those in CSD who are passionate about evidence-based educational practices and have dedicated their time and effort towards collective advocacy for SoTL scholars and, more broadly, SoTL in CSD. Beyond the efforts of these individuals, growth in SoTL has been more recently supported through ongoing ASHA and CAPCSD initiatives related to professional development focused on SoTL. The advent of *TLCSD* has been influential in increasing SoTL knowledge in CSD as well as in supporting SoTL scholars in speech-language pathology and audiology. For these and other reasons, we believe that this is an exciting time for SoTL in CSD. With continued purposeful action and advocacy, there is real potential for SoTL to continue to grow and positively impact how we teach and learn in CSD. We invite all stakeholders in CSD to be a part of this work and to support the continued integration of SoTL into our discipline.

## DISCLOSURES

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## Appendix A

### Survey Questions

Which of the following best describes **your role at your institution**?

- Assistant professor
- Associate professor
- Full professor
- Clinical educator
- Graduate student
- Non-tenure track instructor
- Other

Which broad area of CSD is the main **focus of your teaching**?

- Speech-language pathology
- Audiology

Select ALL of the following resources for **research on teaching and learning** that have you accessed in the past 5 years:

- Peer-reviewed article focused on teaching and learning in a disciplinary research journal
- Peer-reviewed article focused on teaching and learning in a cross-disciplinary research journal
- Book focused on research on teaching and learning
- Professional development focused on teaching and learning (e.g., conference presentations, workshops)
- Social media accounts focused on teaching and learning
- Blogs topical to teaching and learning
- Website topical to teaching and learning
- Other (specify)
- None

Select ALL of the following that best describe how you've used research on teaching and learning:

- I occasionally read/access research on teaching/learning
- I regularly read/access research on teaching/learning
- I share research on teaching and learning with colleagues/students
- I use research on teaching and learning to inform my teaching
- I have conducted a research project focused on teaching and/or learning
- Other (specify)

Please indicate where supports are provided for scholarly teaching and/or the scholarship of teaching and learning:

	Provided within my CSD program	Provided by my institution (e.g., through research office or teaching/learning center)	Provided by my discipline (e.g., ASHA/CAPCSD)
Grants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mentorship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to books and journals focused on teaching and learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional development for scholarly teaching and/or SoTL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Awards/recognitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Funding to present SoTL projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix B

### Summary of Recommendations to Further Integrate SoTL into CSD

#### Increased Awareness of SoTL and its Value to CSD

1. Recognize that SoTL and traditional, disciplinary research are conducted for different purposes, and that both can advance practices in speech-language pathology and audiology.
2. Understand that evidence is multifactorial and is not solely defined by research.
3. Consider that levels of evidence exist that can be differentiated in quality.
4. Adopt practices to enhance rigor in SoTL (e.g., look towards translational clinical research).
5. Appreciate the multiple levels of impact that SoTL can have: micro, meso, macro, and mega.
6. Revise and update work on the signature pedagogies of speech-language pathology and audiology.
7. Identify ways in which SoTL could be integrated into sub-disciplinary groups (e.g., augmentative and alternative communication).
8. Create opportunities for rigorous disciplinary conversations about evidence-informed teaching and learning in CSD.
9. Increase the representation of audiology topics and audiology scholars in SoTL literature in CSD.

#### Support for those Engaged in SoTL across the Academic Lifespan

1. Develop SoTL-focused funding mechanisms at the disciplinary level to support SoTL scholars.
2. Create dedicated awards/recognitions for those engaged in high-quality SoTL work in CSD.
3. Support the sharing of SoTL in CSD in disciplinary publications.
4. Establish a dedicated conference strand at annual conferences for SoTL scholars to share their work and raise awareness for SoTL.
5. Cultivate professional development sessions on topics central to SoTL in CSD across a variety of topics, including advanced content related to methods, ethics, and applications for SoTL.
6. Identify opportunities/structures for formal SoTL mentorship programs to be established and sustained.
7. Curate resources for SoTL to share with students and faculty who would like to learn more about SoTL.
8. Broaden supports for SoTL at the individual program level to encourage engagement in SoTL.
9. Engage doctoral students in SoTL work to provide exposure to evidence-informed pedagogies in CSD and support scholarly productivity.

#### Application of SoTL to Support Students as Learners

1. Prioritize the application of evidence yielded from SoTL in CSD to support high-quality teaching and learning.

2. Translate micro-level SoTL to meso and macro contexts as a form of advocacy for SoTL across individual institutions.
3. Use SoTL to inform important disciplinary conversations about topics such as holistic admissions or social justice.

#### Student Engagement as SoTL Scholars

1. Translate outcomes from SoTL projects to students to support their ability to be scholarly learners.
2. Engage students as co-investigators in SoTL projects to provide access to research experiences and mentorship.

#### Advocacy for SoTL in CSD

1. Advocate for SoTL, broadly, as a valued form of scholarship in CSD.
2. Support SoTL scholars in promotion, tenure, and other evaluation processes, identifying and advocating for SoTL work as meritorious scholarship.
3. Create messaging intended for different audiences in CSD to inform and engage students, clinical educators, faculty, and others in conversations about SoTL.
4. Work with disciplinary groups such as ASHA and CAPCSD to create and support initiatives that expand and explore SoTL in CSD.