Nancy L. Chick, ROLLINS COLLEGE, nchick@rollins.edu
Laura Cruz, PENN STATE, lxc601@psu.edu
Jennifer C. Friberg, ILLINOIS STATE UNIVERSITY, jfribe@ilstu.edu
Hillary H. Steiner, KENNESAW STATE UNIVERSITY, hsteiner@kennesaw.edu

SoTL in Process

Making Space for Failure in the Scholarship of Teaching and Learning: A Blueprint

ABSTRACT

In this essay, we offer a typology of failure in the scholarship of teaching and learning (SoTL) to serve as the foundation for a new line of inquiry to be featured in this expanded section of *Teaching & Learning Inquiry*. Through the typology, we advocate for making space to talk about failure and its many forms in SoTL.

KEYWORDS

failure, imposter, typology

Against a normative imperative of triumph-over-adversity-in-pursuit-of-individualised-success I want to make space for more complex, ambivalent, challenging, hesitant, modest, gentle, self-effacing ways of thinking-with failure—and more care-full, collaborative, collegiate understandings of success within the contemporary academy.
–John Horton

The values John Horton lists in our epigraph above are long-held in SoTL (2020, 2), so increased attention to what falls short of success would not be out of step with the field. And yet, it is perhaps telling that in her taxonomy of question types in the scholarship of teaching and learning (SoTL), Pat Hutchings framed the predominant question as "what works?" rather than "what doesn't work?" (2000, 4). After all, the former is reflective of many long-held values in the field, including the emphasis on iterative change and knowledge-building. However, knowing what doesn't work and why also contributes to change, improvement, and knowledge in meaningful ways.

In fact, we worry that the fear of failure—or at least the fear of enshrining failure permanently in print—has stunted or silenced some important conversations in and about SoTL. SoTL skeptics have even posited the absence of failure as a critical blind spot (Canning and Masika 2022). Ultimately, if we want to better understand "unsuccessful" practices and other kinds of failure, we need to interrogate what we mean by "success," change scholarly conventions and institutional cultures, and embrace the value of failure with humility, curiosity, and grace. In this essay, we hope to contribute to this process and build on the conversations about failure that have preceded ours.[1]

THE UBIQUITY OF FAILURE IN THE ACADEMY

The concept of failure spans disciplinary (e.g., "market failure" in economics), multi-disciplinary (e.g., "instrument failure" in laboratory work), and transdisciplinary (e.g., constructive failure) contexts. Beyond the specific term "failure," cognate concepts are also significant in some fields, such as "error" in composition studies (Bartholomae 1980). Looking at failure differently from their colleagues in composition studies, medical and clinical disciplines convene morbidity and mortality conferences to discuss mistakes in diagnosis and treatment of patients (Orlander, Barber, and Fincke 2002). In sports psychology, the inevitable agony of "defeat" can be either debilitating or motivating for an athlete. Indeed, failure is a pervasive concept in higher education writ large, as chronicled in John Horton's (2020) powerful article "Failure Failure Failure Failure Failure Failure: Six Types of Failure Within the Neoliberal Academy."

The negative connotations of failure are perhaps a reflection of its primary definition as a deficit, or the absence of success or lack of a positive outcome. This essential opposition between failure and success has served to tie the historical fates of the two concepts together. For example, in his well-known depiction of the Protestant Ethic, German sociologist Max Weber posited that Western culture was distinctive in conflating the signs of external success (e.g., material prosperity) with positive moral traits such as honesty (Rotenberg 2018). On the flip side, failure then became associated with weakness of character (Rotenberg 2018; Sandage 2005). In other words, Weber's work suggests that the meaning of success and failure are culturally constructed and subject to considerable variations in both interpretation and application.

We seek to problematize the meaning and experience of failure in order to create spaces that embrace the messiness that gets lost in its dualistic representation as the opposite of success. This proposed shift parallels that of Randy Bass in his widely read 1999 essay "The Scholarship of Teaching: What is the Problem?" He argues for stripping the term "problem" of its negative connotations to encourage greater exploration into the intricate and varied challenges of teaching and learning. Further, if the "problem" to be explored is sufficiently complex, then it follows that our definitions of success and failure in addressing that problem may be similarly complex, contested, and/or ambiguous (Bunnell et al. 2022; Schrum and Mårtensson 2023).

In a later essay (2020), Bass extends his original argument to suggest that it is a profound disservice to treat student learning as a problem to be solved, with clear lines of success and failure; rather he suggests that scholars should "restlessly and authentically open up the questions of learning and higher education as if our human future depended on it" (28). In reaching beyond the dualisms of success/failure and problems/solutions, the spaces we argue for in this essay are restless and authentic, and they follow Gary Poole's advice for SoTL to "represent complexity well" (2013, 141). In these spaces, we can reimagine how we define, value, experience, and talk about teaching, learning, and scholarship.

A TYPOLOGY OF FAILURE IN SOTL

As we explored these spaces in conversation, conference sessions, and literature reviews, we began to notice that there were different types of failure that came from different sources and had different implications. At first, we borrowed Horton's (2020) six types, but as we continued to think about the specific experiences in SoTL, other types and configurations emerged. We noticed seven types that eventually came together within three specific sites of the (apparent) failure: students, the SoTL project, or the SoTL practitioner. Ultimately, we mapped a typology that we now propose as a preliminary blueprint for opening up public discussions of failure in the field. (See Figure 1.) The ideas we present below represent our own perceptions and experiences as SoTL scholars. As such, we

anticipate that others will add to our typology over time and, in doing so, will add greater depth and richness to considerations of failure in SoTL.

Figure 1: *A typology of failure in SoTL*
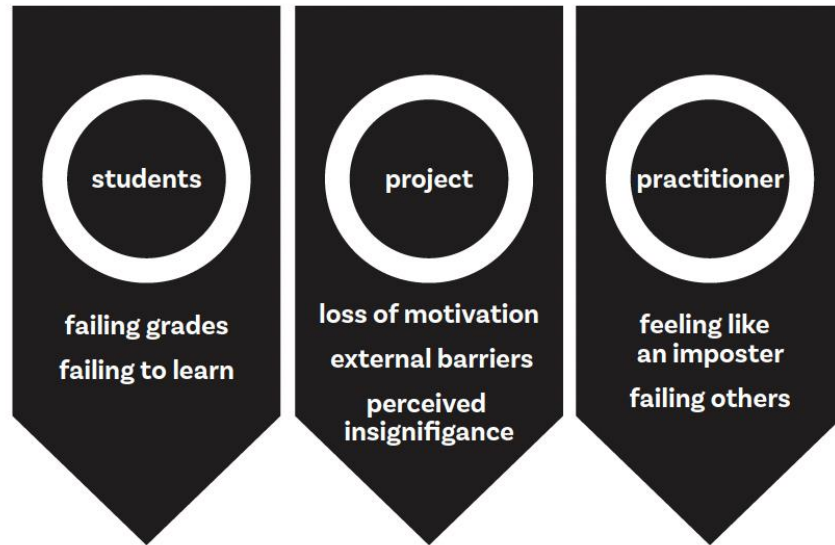
Site 1: Students

In this first section, we identify a first, critical site of failure in SoTL: the spaces where our students operate as learners. As SoTL scholars, we must acknowledge that outcomes from some SoTL projects—however well designed—might produce evidence that students haven't experienced a positive learning outcome. Students themselves have not failed, per se; however, some aspect of their experience as a learner has not been successful, as revealed through the assessment process. As Horton describes it, this type of failure is present when we "label some students and some academic work as 'fails,'" as well as when we "slip into a mode of making judgements and assuming the authority to define some work and some individuals as 'fails'" (2020, 4).

Failing grades

Before we explore the kinds of failures associated with doing SoTL projects, we should consider the "failures" we experience and name in our classrooms. In our roles as teachers, we regularly operate within a "success / failure" framework, whether we like it or not, as most practitioners are also teachers who are required by their institutions to assign grades. Some may also be pressured to assign a sufficient number of failing grades to avoid (the appearance of) grade inflation. This obligation can feel arbitrary, damaging to the teacher-student relationship, and incompatible with a developmental approach to learning.

This fraught relationship with failing grades carries over to our role as researchers in SoTL. We see this misplaced focus on students' academic "fails" when researchers use DFW rates (i.e., the number of students who receive failing letter grades or withdraw from a course) as the sole measure of student achievement, a problematic practice because we know that such grades provide an incomplete picture of student learning. Few of us would answer "good grades" when asked how we know our students have truly learned a concept; however, in many SoTL studies—particularly in "what works" projects that introduce a new teaching method in one course section and compare

grades to another traditionally-taught section—grades are the only way we measure our interventions' outcomes.

Some SoTL scholars have approached students' "failure" in thoughtful ways, following Horton's recommendation of "critically reflecting on the language and assumptions of assessment" (2020, 4). Dennis Jacobs, for instance, looks at his course's DFW rates differently. Rather than using those grades as evidence that "at-risk students" were failing his course, he saw them as evidence that his course was failing these students. He explains, "Their career ambition was out the window because of a bad experience in the first six weeks in General Chemistry–a course that offered very little opportunity to grow and develop. . . . I felt a responsibility to address what I saw as an injustice" (Jacobs 2000, 41–42). After redesigning one section of the course to be more interactive with cooperative learning and study teams, he assessed the effectiveness through specific exam questions that aligned with specific types of problem-solving, video recordings of in-class group learning, pre- and post-course surveys, and focus groups with the students, as well as retention and attribution data from subsequent courses. In the end, after two years, Jacobs's use of "failing" grades served as a catalyst for him to do better, approximately 40% more students completed subsequent science courses.

Dianne Fallon (2006) offers another example of a SoTL practitioner more thoughtfully framing students' apparent failures. After her students articulate what they learned in ways that fall far from what she expected in her diversity course, she wonders how to "understand their statements as other than a 'deficit,' as a problem, as evidence that I had not succeeded in stimulating the kind of complex critical thinking I had hoped for" (412). Her response is a productive rereading of students' failure: instead of concluding that students had simply devolved, she reflects, "When we examine student learning, . . . nothing is as obvious as it might seem" (413). She had observed students thinking differently earlier in the semester, "striving for complexity, but then revert[ing] to another position that feels more comfortably aligned with, or less challenging to, the value system and past experiences that they've brought with them into the classroom" (413). Rather than labeling her students as failures, she reframes their responses as part of a larger continuum in how students may respond to diversity content and develops a "Taxonomy of Diversity Learning Outcomes, Behaviors, and Attitudes" (415).

Failing to learn

In some fields, experiments are designed for a specific outcome, and any different result is a failure. This kind of deductive work begins with a hypothesis, and the goal of the project is to test the veracity of that hypothesis. A parallel project in SoTL is the "what works?" quasi-experiment designed to "seek evidence about the relative effectiveness of different approaches," to find out if students "are learning more" through a particular teaching intervention (Hutchings 2000, 4). If the intervention didn't "work" and the students didn't learn more, it makes sense if the SoTL practitioner sees failure, especially given the dual role of teacher-researcher: as teacher, the activity has failed because the students didn't learn, and as researcher, the desired outcome wasn't achieved. However, the "What went wrong?" query is actually a fruitful area for SoTL.

In a published example of this kind of failure, Foong May Yeong (2021) explores why her life sciences students "were not solving such [ill-structured] problems effectively" (138). She probes their work in discussion forums to find the precise moment when students go in the wrong direction and finds that "they failed to address the problem adequately" because their "key weakness was scope identification of the problem" (152). This project revealed the root of students' failure to learn. Yeong concludes her article, "Based on this study, I have obtained funding to examine the effects of scaffolds

we will employ in subsequent semesters on students' strategies to solve ill-structured problems" (154). This article illustrates the value of SoTL projects and publications that carefully chronicle—not simply try to correct—students' misconceptions, novice practices, bottlenecks, and threshold concepts that interfere with student learning (Ambrose et al. 2010; Bransford, Brown, and Cocking 2000; Middendorf and Pace 2004; Meyer and Land 2003; National Academies 2018).

Site 2: The project

In this section, we will discuss instances in which the locus of failure is the SoTL project itself, or when a particular study does not persist to its desired end. Across contexts where SoTL is undertaken, there are myriad ways in which a project might not work in the sense of coming to fruition as a research artifact. Horton (2020) attributed this to the general "messiness" of research, but in reality, this type of failure leads to the abandonment of projects that might have had the potential to change our thinking about teaching or learning.

Loss of motivation

Ben Anderson (2020) wrote about what he termed "failures of interest," characterized by a sense of detachment from a project or other planned work (1). He suggested that these types of failures might stem from a lack of engagement—or even feelings of boredom—with a topic or project. One could see how a lack of sustained interest might affect a scholar's ability to complete a SoTL project. Before conducting a SoTL project, scholars may think critically about what they wish to study, using intuition and experience to formulate beliefs and recognize curiosities that inform the aims and structure of a project (Poole 2018). Over time, a scholar's priorities and interests might change. What was of great interest in one semester might not be as applicable in another. A change in teaching assignment, pedagogical focus, or course design might render a wonderfully relevant project less important or timely. We can also imagine SoTL projects that begin with someone else's idea of what is important or interesting, resulting in a topic that's not a priority in a faculty member's varied workload. In those cases, failure does not lie in planning a good project, but simply a lack of motivation to see the project through to fruition.

Failures of interest can also be related to the institution's values conflicting with undertaking SoTL projects. Instructors engaged in SoTL projects need to weigh the balance of institutional recognition and reward systems relative to the time commitments required for a SoTL project. Institutions that only reward traditional research offer no motivation for—and in fact disincentivize—undertaking SoTL projects, even for faculty members who may want to. Even more complex are institutions with "competing visions," or those that simultaneously under-value SoTL as research but place increasing emphasis on professional development in teaching and learning (Manarin and Abrahamson 2016, 3). Framed in this way, engagement in SoTL becomes a matter of how a faculty member integrates interest and effort in order to succeed in a given institutional environment.

External barriers

Some projects fail not from lack of intrinsic interest or motivation, but because of varied extrinsic issues that hinder a project's completion. These failures can be caused by institutional obstructions that hinder the completion of research. For example, in their presentation entitled "Adventures and Insights of a 'Failed' SoTL Project," Chris Ostrowski, Nancy Chick, and Galicia Blackman (2017), describe an abandoned project on active learning spaces after experiencing difficulties with SoTL projects clearance by their institutional ethics board. This experience isn't unique, as many ethics committees continue to wrestle with the ways in which SoTL research differs

from their conventional expectations and the specific challenges of SoTL (Fedoruk 2022). Others have abandoned projects due to a lack of administrative support for SoTL, struggles to hold a research team together, or course reassignment or allocation, all of which exacerbate SoTL's frequent position as an add-on to a faculty member's regular workload.

Data analysis often serves as another critical point of abandonment. An internal 2019 survey of Penn State faculty, for example, indicated that 40% of the 365 respondents had, at some point, collected data on teaching and learning interventions, but stopped there. Although there may be many reasons for ending a SoTL project at this point, some are likely the result of institutional barriers. For example, some may not be able to provide direct statistical support for faculty research (of any kind), or they may not subscribe to or provide funding for the software needed for advanced qualitative work. For many faculty seeking support for specific methodologies, these resources can make the difference between an abandoned and a completed SoTL project.

Perceived insignificance

Speaking of data, a frequent topic of conversation among SoTL scholars, especially those with social science backgrounds, is the challenge of statistical significance. When scholars who are used to certain methods from their disciplines misapply these to the "messier" localized context of a SoTL study, this can lead the researcher to make inferences that may be disappointing—and even inaccurate. Null hypothesis testing, which—when identified—indicates a lack of relationships between groups or populations, is a common methodological approach for large-scale quantitative studies. However, this approach has limitations for smaller-scale SoTL studies that involve multiple confounding variables (McGrath 2016). When novice SoTL researchers familiar with quantitative methodology see that their data analysis has produced nothing of statistical significance, it can feel like a failure. In this way, the assumption of no statistical significance becomes the assumption of no significance. Indeed, McGrath cautions SoTL researchers to remember that a lack of statistical significance does not mean that no difference exists. Often, the trouble has to do with statistical power, which is related to sample size. Small studies comparing one teaching method to another, for example, require extremely large differences between groups to achieve statistical significance. Additionally, when we compare pre-existing groups—such as two different course sections—we introduce confounding variables, such as the time of day the class meets, that further complicate the analysis (Grauerholz and Main 2013). To statisticians, SoTL research in general is fraught with confounding variables.

Jeff Kuznekoff describes an example of this type of failure during his study of students' note-taking abilities (Dich et al. 2017). Likely due to low statistical power and uncontrollable confounding variables, he found no statistically significant differences when comparing outcomes for students who took notes by hand and those who took notes by electronic tablet. For him, this result was surprising and disappointing, given his earlier research findings. Although Kuznekoff writes that he chose to view this failure as a spark for further research, many studies that fail to find significant results for these reasons may be left unpublished and never reexamined, a phenomenon known as the "file drawer problem" (Rosenthal 1979).

Some evidence suggests this stance may be changing. A handful of social science journals (ex. *Teaching of Psychology*) now publish file drawer projects. In the sciences, a number of voices have emerged and advocated for a rethinking of the meaning of the null hypothesis (Munafò and Neill 2016), including an editorial in the influential journal *Nature* (February 2020). Despite signs of

potential change, a failure of significance continues to have an impact not only on the success or failure of the project but also on the researchers.

Site 3: The practitioner

In this section, we will discuss pathways towards failure in scholarship that are tied to individual researchers themselves. Horton (2020) described two types of failure related to the researcher's feelings of being an imposter: failure resulting from performance anxiety and failure resulting from feelings of not belonging. He also outlined an additional type of failure tied to the researcher's regret over not having done more to serve others with their scholarship. These feelings of failure have the potential to limit success to having impact, being productive, developing a scholarly identity, or meeting external expectations for scholarly work.

Feeling like an imposter

One of the most harmful failures Horton describes is found in the "pervasiveness of individualized performance anxieties" that come from not feeling "enough" according to externalized metrics (3). His essay begins with 12 repetitions of the deleted phrase "~~I am not a failure,~~" ending with "I am not a failure . . . but I feel like one" (1). This opening is Horton's expression of his own performance anxiety and a reminder of the power of this type of anxiety across academia, including in SoTL. Performance anxiety is linked to feeling like an imposter, fraudulently deceiving everyone—temporarily, at least—with their presence in a space where it feels like they do not belong. Many have written about the shift from disciplinary expert to SoTL practitioner as fraught with feeling like an "amateur" (Felten 2013, 121; Hutchings and Huber 2008, 239; McClurg, MacMillan, and Chick 2019, 6; Pace 2004, 1171; Poole and Chick 2016, 1). Although SoTL is a unique space where almost all scholars come to it as relative novices, this "fear and loathing of being a novice again; of having to master new theories of and methodologies for investigating 'learning'" (Tremonte 2011, 2) may set a stage for the sense of not enough-ness Horton describes. Though SoTL doesn't require expertise in the teaching and learning literature (Steiner and Hakala 2021) and methodological diversity has long been one of its strengths (Bernstein 2018; Chick 2014; Huber and Morreale 2002), the fear of having too much to learn can be overwhelming for new SoTL researchers, who may envision themselves "falling prey to the trap of having to immediately master entire *corpi* of scholarship" (Tremonte 2011, 2). This may be especially true in fields where disciplinary SoTL is expected to look more like the scholarship of discovery (Wilson-Doenges and Gurung 2013).

The fear of feeling like (or being seen as) an amateur can plague experienced or new SoTL practitioners; it even prevents some from attempting or completing a project. For more experienced researchers who are experts in their field, stepping into another field can provoke a "fear of novice-stry" (Tremonte 2011, 2) or an angst that accompanies looking up from the bottom of a learning curve. Conversely, SoTL scholars without a terminal research degree or with less experience in designing or engaging in research might worry that their scholarship is not sufficiently rigorous or not relevant enough. SoTL may be their first foray into research, provoking the impression of being an amateur in a world of experts. They may be curious about and interested in engaging in SoTL but lack the confidence to give SoTL a try. Perhaps another group harmed by the potential for feeling like an imposter in SoTL is colleagues who have already experienced a sense of other-ness in higher education. Citing Catherine Oliver and Amelia Morris (2019), Horton writes:

> in many spaces of the academy, certain bodies are habitually centered as authoritative, while others are rendered out-of-place and awkward, in ways which undoubtedly

perpetuate forms of marginality constituted by the still gendered, classed, ableist, not-decolonised, heteronormative, cis-normative, aged academy we inhabit. (4)

A SoTL researcher who is already experiencing marginalizing messages from the academy may find those feelings exacerbated when stepping into the novel territory of SoTL. They are drawn out of their disciplinary comfort zones and into a new, often multidisciplinary space. This space isn't always perceived as welcoming, and the consequences are profound for SoTL as a field. Some of these scholars may, to some degree, have the sense that they do not really belong in the SoTL community (Miller-Young, Yeo, and Manarin 2018; Potter and Raffoul 2023; Yahlnaaw 2019). The barriers formed by this feeling of failure have the potential to limit, diminish, or alienate the voices heard in SoTL, an effect that contradicts our efforts to grow and mature the field.

Feelings of not belonging can also arise in moments where a SoTL scholar's disciplinary identity leads them to question their SoTL identity. Practices that might be typical in disciplinary scholarship might not be relevant or possible in SoTL, leading researchers to question their knowledge and understanding of the research process. Ultimately, this could compromise a SoTL project. Beyond this, SoTL scholars may feel sidelined in their work due to feedback from peers indicating that SoTL's inherent characteristics (i.e., context-based study, sometimes small participant groups) render such work unworthy of merit when compared to studies that follow disciplinary norms (Friberg et al. 2023). These types of bias can lead to failure when reviewers reject SoTL articles and conference proposals that do not meet a narrow definition of the work or when those who do not feel their work would be valued may choose to terminate their projects or hide them in the shadows.

And yet, navigating this tension between disciplinary and SoTL identity can also prompt deep reflection on the liminal space where SoTL sits (Miller-Young, Yeo, and Manarin 2018; Simmons, et al. 2013). As SoTL researchers work through these tensions, organizations like ISSOTL have an important role to play as welcoming spaces. What messages are we inadvertently sending about who's "in" and who's "out"? How can we normalize the feelings that many of us have of being a SoTL imposter? As Simmons and her colleagues (2013) remind us, SoTL "requires us to develop the capacity to become comfortable being in a nexus of discomfort created by SoTL work" (12). Rather than a form of failure, the uncomfortable "troublesome knowledge" (Manarin and Abrahamson 2016) of SoTL can perhaps be reframed as a normal experience in this liminal space where we all sit.

Failing others

In this failure type, the researcher feels a sense of guilt, disappointment, or inadequacy over what might have been. In Horton's typology, he describes "a regret that one could have done more to improve the lives of participants and communities engaged in research" (3). In the context of SoTL, this anxiety over what one would have, could have, or should have done can take the form of lamenting lost opportunities for student learning. If an instructor discovers an effective new approach through SoTL, for example, they may wonder how previous students would have benefitted if they had discovered this sooner, or how current students may have benefitted had they utilized it more often or on a wider scale. This individual guilt can even be extended to refer to the hypothetical students who might have benefitted should the results of a SoTL study have reached the hands of other instructors at other institutions and places, sooner.

This same sense of falling short could be extended to the researcher's participation in the broader network of SoTL practitioners. This could manifest itself as simply letting down or disappointing co-authors on a project team, but it could also be extended to the network itself. The SoTL movement has consistently espoused lofty—some might even say idealistic—goals about

fostering institutional cultures that embrace generative approaches to teaching and learning and creating teaching commons in which the work of teaching is shared widely and freely (Huber and Hutchings 2005), all buoyed through vibrant international networks of teacher-scholars (Poole, Taylor, and Thompson 2007). Any time our reality doesn't match these ideals (e.g., our institutional culture didn't change, a teaching commons didn't emerge, international networks fell apart), we may experience a kind of loss or failure. Similarly, others may find themselves disappointed or frustrated by the limited reach of SoTL—their individual work, or the corpus of SoTL as a whole—when it doesn't have the impact on teaching, learning, their institutions, and/or scholarship that they dared to hope it might. Horton rightly worries that the fear of disappointment might have a paralytic effect as we "feel hopelessly inadequate . . . which can discourage us from trying to do *anything*" (3).

When an individual engages in SoTL research, they are not simply producing results for themselves and their own classes; they're also contributing to others' knowledge and practices, i.e. Huber and Hutchings's (2005) concept of the "teaching commons." In this way, practitioners have an ethical obligation to this commons, more particularly to current and future peers and their students (Hutchings 2002). Indeed, in one of the more influential SoTL publications, Scott Freeman and his colleagues articulated a sense of shared ethical responsibility to those who both read and produce SoTL (2014). By affirming the essential soundness of SoTL research (in their case, through a study focused on active learning in STEM classes), their work suggests that everyone who teaches in higher education has a professional obligation to be mindful of this growing body of evidence-based practice. To ignore our collective insight from SoTL (and perhaps discipline-based educational research as well) practice, they argue, constitutes a dereliction of duty, a moral failing on the part of an instructor who is not only letting their students down, or a scholar who is letting down the field, but also the next generation of scholars, practitioners, employees, and citizens in their respective fields.

CONCLUSION

In Suzanne Le-May Sheffield's poem "Awakening (to *all* of our SoTL stories)," she laments what happens if we do not confront failure:

> Expected to expound our heroic stories from the mountain top,
> We slice and condense with bravado,
> Generalize,
> Extract failure, frustration, fear,
> Making us less human. (2020, 221)

In her accompanying commentary, Sheffield explains that she wrote the poem after "hearing the other 30 participants' reflections" in an ISSOTL18 workshop that challenged "the human tendency to tell [SoTL] stories" that conform to the archetypal "hero's journey," a progress narrative full of obstacles overcome, lessons learned, the triumph of a problem solved, and the teacher-scholar as the hero (Chick and Felten 2018, Sheffield 2020, 222).

Similarly, the last entry in Horton's original list of failures calls out what he considers a wolf in sheep's clothing: it is the "*right kind of failure,*" a disingenuous and "performative" failure story strategically highlighting "one's ability to narrate a 'triumph over adversity'" (emphasis in original; Horton 2020, 4). When we initially brainstormed ideas for our ISSOTL22 panel on failure in SoTL, several of our stories fit this description. In our subsequent discussions, however, we distinguished between the self-congratulatory stories that Horton describes and our authentic experiences of failure

followed by pulling ourselves up off the floor and committing to a meaningful resolution. Learning from one's past actions is an integral part of the iterative reflection that lies at the heart of SoTL practice, but we have to be alert when we present these stories, as they may serve to reinforce the necessity of progressing from failure to success. As Horton cautions, "we must do more than tell tales of triumph over adversity" (2020, 10). We add to Horton's caution by acknowledging that our typology is by no means comprehensive, and it focuses on experiences within the SoTL community. Freeman et al.'s (2014) evocation of moral failure hints at the limits of our work here, suggesting ways of extending the construct of failure beyond the individual researcher or project and even beyond the SoTL community. We look forward to what emerges as this new section of *TLI* invites experiences with, perceptions of, explorations in, and challenges to the meaning of failure in the academy.

At the start of this project, we (somewhat jokingly) referred to failure in SoTL as "what's *not* working," a play on Hutchings's well-known taxonomy of SoTL research questions. As we dug into the literature, as well as our own practice, however, we jettisoned the binary composition of that framing. Historically, failure has been depicted as the opposite of success, suggesting that one could be one or the other, but not both—and certainly not both at the same time. This failure was a singular and often resounding judgment, inscribed on a person or project externally and eternally, akin to American literature's scarlet letter or the Chinese concept of losing face. We hope this article has problematized the dualistic inscription of who or what is/is not a failure across multiple components (students, projects, practitioners) of SoTL work.

With our current typology and future extensions, we aim to propose a lively and activist agenda for talking about failure. We can no longer deny its existence like Flat Earthers, or speak of it in hushed tones as if it's a scandal or terminal disease, or play the role of bystanders who gawk at traffic accidents. We can recognize that the word failure continues to have power, including power over us, whether as teachers, scholars, or even human beings. We can work to neutralize its effect, but we can also make a case for harnessing that power to open up deeper, richer, and more meaningful spaces that embrace the messiness of teaching, learning, and scholarship practices. Indeed, Sheffield ends her poem with encouragement to "unravel the threads of our stories" because "Disturbing the still surface of deep waters, / Makes us fully human" (221). Through sharing all of our stories, she suggests, we may find joy, hope, and meaningful connection with one another. We carry Sheffield's encouragement forward by challenging SoTL practitioners, reviewers, theorists, editors, and supporters to embrace the full range of authentic SoTL stories that chronicle what makes us fully human.

AUTHOR BIOGRAPHIES

Nancy L. Chick is director of faculty development at Rollins College in Winter Park, Florida (USA). She has authored, edited, co-authored, and co-edited many publications on the results of SoTL projects and on the field of SoTL itself. With Gary Poole, she was the founding co-editor of Teaching & Learning Inquiry.

Laura Cruz is a research professor (full) of teaching and learning scholarship with the Schreyer Institute for Teaching Excellence at Penn State in State College, Pennsylvania (USA).

Jennifer C. Friberg is director of scholarly teaching and Cross Endowed Chair in the Scholarship of Teaching and Learning in the Center for Integrated Professional Development at Illinois State University in Normal, Illinois (USA) where she also serves as a professor of communication sciences and disorders.

Hillary H. Steiner is associate director for the Scholarship of Teaching and Learning and professor of educational psychology at Kennesaw State University in Kennesaw, Georgia (USA).

NOTES

1. We are especially grateful to those who attended our ISSOTL22 panel entitled "Fear of Failure: How We Talk About What Doesn't Work in SoTL" in Kelowna, BC. The room was small, the audience was big, and their thirst for this conversation was even bigger. We also wish to note that our names are listed in alphabetical order, rather than as an indication of differences in contribution to this essay.

REFERENCES

Ambrose, Susan A., Michael W. Bridges, Michele DiPietro, Marsha C. Lovett, and Marie K. Norman. 2010. *How Learning Works: 7 Research-Based Principles for Smart Teaching*. San Francisco: Jossey-Bass.

Anderson, Ben. 2020. "Failures of Interest." *Emotion, Space, and Society* 35: 1–4. https://doi.org/10.1016/j.emospa.2020.100670.

Bartholomae, David. 1980. "The Study of Error." *College Composition and Communication* 31 (3): 253–69.

Bass, Randy. 1999. "The Scholarship of Teaching: What's the Problem?" *inventio* 1 (1): 1–10.

Bass, Randy. 2020. "What's the Problem Now?" *To Improve the Academy* 39, no. 1 (Spring): 3–30. http://dx.doi.org/10.3998/tia.17063888.0039.102.

Bernstein, Jeffrey L. 2018. "Unifying SoTL Methodology: Internal and External Validity." *Teaching & Learning Inquiry* 6 (2): 115–26. https://doi.org/10.20343/teachlearninqu.6.2.9.

Bransford, John D., Ann L. Brown, and Rodney R. Cocking. 2000. *How People Learn: Brain, Mind, Experience, and School*. Washington, D.C.: National Academies Press.

Bunnell, Sarah L., S. Raj Chaudhury, Chng Huang Hoon, Nancy Chick, Gary Poole, Katarina Mårtensson, Kelly Schrum, and Michelle J. Eady. 2022. "Science of Teaching Is Not Being Ignored." *The Chronicle of Higher Education*. https://www-chronicle-com.ezproxy.rollins.edu/blogs/letters/science-of-teaching-is-not-being-ignored.

Canning, John, and Rachel Masika. 2022. "The Scholarship of Teaching and Learning (SoTL): the Thorn in the Flesh of Educational Research." *Studies in Higher Education* 47 (6): 1084–96. https://doi.org/10.1080/03075079.2020.1836485.

Chick, Nancy L. 2014. "Methodologically Sound under the 'Big Tent': An Ongoing Conversation." *International Journal for the Scholarship of Teaching and Learning* 8 (2): 1–15. https://doi.org/10.20429/ijsotl.2014.080201.

Chick, Nancy, and Peter Felten. 2018. "How to Tell a True SoTL Story." Workshop at the Annual Conference of the International Society for the Scholarship of Teaching and Learning, Bergen, Norway, October 2018.

Dich, Linh, Karen M. Brown, Jeff H. Kuznekoff, Theresa Conover, John P. Forren, and Janet Marshall. 2017. "Growing Lemon Trees from Lemons: Lessons Reaped from a SoTL Faculty Learning Community's Research 'Failures.'" *Journal of the Scholarship of Teaching and Learning* 17 (4): 1–16. https://doi.org/10.14434/josotl.v17i4.21377.

Fallon, Dianne. 2006. "'Lucky to Live in Maine': Examining Student Responses to Diversity Issues." *Teaching English in the Two-Year College* 33 (4): 410–20.

Fedoruk, Lisa. 2022. *Ethics and the Scholarship of Teaching and Learning*. Cham, CH: Springer.

Felten, Peter. 2013. "Principles of Good Practice in SoTL." *Teaching & Learning Inquiry* 1 (1): 121–25. https://doi.org/10.20343/teachlearninqu.1.1.121.

Freeman, Scott, Sarah L. Eddy, Miles McDonough, Michelle K. Smith, Nnadozie Okoroafor, Hannah Jordt, and Mary Pat Wenderoth. 2014. "Active Learning Increases Student Performance in Science, Engineering, and Mathematics." *Proceedings of the National Academy of Sciences* 111 (23): 8410–15. https://doi.org/10.1073/pnas.1319030111.

Friberg, Jennifer, Jerry K. Hoepner, Allison M. Sauerwein, and Kerry Mandulak. 2023. "The Integration of the Scholarship of Teaching and Learning into the Discipline of Communication Sciences and Disorders." *Teaching and Learning in Communication Sciences & Disorders* 7 (1): 1–28. https://doi.org/10.30707/TLCSD7.1.1675490380.873306.

Grauerholz, Liz, and Eric Main. 2013. "Fallacies of SoTL: Rethinking How We Conduct our Research." In *The Scholarship of Teaching and Learning In and Across the Disciplines*, edited by K. McKinney, 152–68. Bloomington, Indiana: Indiana University Press.

Horton, John. 2020. "Failure Failure Failure Failure Failure Failure: Six Types of Failure within the Neoliberal Academy." *Emotion, Space and Society* 35: 1–13.

Huber, Mary Taylor, and Pat Hutchings. 2005. *The Advancement of Learning: Building the Teaching Commons*. San Francisco: Jossey-Bass.

Huber, Mary Taylor, and Sherwyn P. Morreale. 2002. *Disciplinary Styles in the Scholarship of Teaching and Learning: Exploring Common Ground*. Washington, DC: American Association for Higher Education and The Carnegie Foundation for the Advancement of Teaching.

Hutchings, Pat. 2002. *Ethics of Inquiry: Issues in the Scholarship of Teaching and Learning*. Carnegie Foundation for the Advancement of Teaching.

Hutchings, Pat, ed. 2000. *Opening Lines: Approaches to the Scholarship of Teaching and Learning*. Menlo Park, CA: Carnegie Foundation for the Advancement of Teaching.

Hutchings, Pat, and Mary Taylor Huber. 2008. "Placing Theory in the Scholarship of Teaching and Learning." *Arts & Humanities in Higher Education* 7 (3): 229–44. https://doi.org/10.1177/1474022208094409.

Jacobs, Dennis. 2000. "A Chemical Mixture of Methods." In *Opening Lines: Approaches to the Scholarship of Teaching and Learning*, edited by Pat Hutchings, 40–52. Menlo Park, CA: Carnegie Foundation for the Advancement of Teaching.

Manarin, Karen, and Earle Abrahamson. 2016. "Troublesome Knowledge of SoTL." *International Journal for the Scholarship of Teaching and Learning* 10 (2): 1–6.

McClurg, Caitlin, Margy MacMillan, and Nancy Chick. 2019. "Visions of the Possible: Engaging With Librarians in the Scholarship of Teaching and Learning." *Teaching & Learning Inquiry* 7 (2): 3–13. https://doi.org/10.20343/teachlearninqu.7.2.1.

McGrath, April. 2016. "Searching for Significance in the Scholarship of Teaching and Learning and Finding None: Understanding Non-Significant Results." *Teaching & Learning Inquiry* 4 (2): 150–55. https://doi.org/10.20343/teachlearninqu.4.2.12.

Meyer, Jan, and Ray Land. 2003. "Threshold Concepts and Troublesome Knowledge: Linkages to Ways of Thinking and Practising within the Disciplines." In *Improving Student Learning: Ten Years On,* edited by Chris Rust, 412–24. Edinburgh: University of Edinburgh.

Middendorf, Joan, and David Pace. 2004. "Decoding the Disciplines: A Model for Helping Students Learn Disciplinary Ways of Thinking." *New Directions for Teaching & Learning* 98 (Summer). Wiley.

Miller-Young, Janice, Michelle Yeo, and Karen Manarin. 2018. "Challenges to Disciplinary Knowing and Identity: Experiences of Scholars in a SoTL Development Program." *International Journal for the Scholarship of Teaching and Learning* 12 (1): 1–6.

Munafò, Marcus, and Jo Neill. 2016. "Null is Beautiful: On the Importance of Publishing Null Results." *Journal of Psychopharmacology* 30 (7): 585.

Nature. 2020. "Editorial: In Praise of Replication Studies and Null Results." 578, 489–90. https://doi.org/10.1038/d41586-020-00530-6.

Orlander, Jay D., Thomas W. Barber, and B. Graeme Fincke. 2022. "The Morbidity and Mortality Conference: The Delicate Nature of Learning from Error." *Academic Medicine* 77 (10): 1001–1006.

Ostrowski, Christopher P., Nancy Chick, and Galicia Blackman. 2017. "Adventures and Insights of a 'Failed' SoTL Project." Paper presented at the International Society for the Scholarship of Teaching and Learning Conference (ISSOTL17). Calgary, Canada, October 11–14, 2017.

Pace, David. 2004. "The Amateur in the Operating Room: History and the Scholarship of Teaching and Learning." *American Historical Review* 109 (4): 1171–92. https://doi.org/10.1086/ahr/109.4.1171.

Poole, Gary. 2013. "Square One: What is Research?" In *The Scholarship of Teaching and Learning In and Across the Disciplines*, edited by Kathleen McKinney, 135–51. Bloomington, IN: Indiana University Press.

Poole, Gary. 2018. "Using Intuition, Anecdote, and Observation." In *SoTL in Action: Illuminating Critical Moments of Practice*, edited by Nancy L. Chick, 7–14. Sterling, VA: Stylus Publishing.

Poole, Gary, and Nancy Chick. 2016. "On the Nature of Expertise in SoTL". *Teaching & Learning Inquiry* 4 (2):1–4. https://doi.org/10.20343/teachlearninqu.4.2.1.

Poole, Gary, Lynn Taylor, and John Thompson. 2007. "Using the Scholarship of Teaching and Learning at Disciplinary, National and Institutional Levels to Strategically Improve the Quality of Post-Secondary Education." *International Journal for the Scholarship of Teaching & Learning* 1 (2): 1–16. https://doi.org/10.20429/ijsotl.2007.010203.

Potter, Michael K., and Jessica Raffoul. 2023. "Engaged Alienation: SoTL, Inclusivity, and the Problem of Integrity." *International Journal for the Scholarship of Teaching and Learning* 17: 1–6. https://doi.org/10.20429/ijsotl.2023.17102.

Rosenthal, Robert. 1979. "The File Drawer Problem and Tolerance for Null Results." *Psychological Bulletin* 86 (3): 638.

Rotenberg, Mordechai. 2018. *Damnation and Deviance: The Protestant Ethic and the Spirit of Failure*. New York: Routledge.

Sandage, Scott A. 2005. *Born Losers: A History of Failure in America*. Cambridge, MA: Harvard University Press.

Schrum, Kelly, and Katarina Mårtensson. 2023. "Growing SoTL—Embracing Diversity, Messiness, and Complexity." *Teaching & Learning Inquiry* 11 (January): 1–4. https://doi.org/10.20343/teachlearninqu.11.1.

Sheffield, Suzanne Le-May. 2020. "Awakening (to *All* of Our SoTL Stories)." *Teaching & Learning Inquiry* 8 (2): 221–23. https://doi.org/10.20343/teachlearninqu.8.2.14.

Steiner, Hillary H., and Christopher M. Hakala. 2021. "What Do SoTL Practitioners Need to Know about Learning?" *Teaching & Learning Inquiry* 9 (1): 79–85. https://doi.org/10.20343/teachlearninqu.9.1.7.

Tremonte, Colleen M. 2011. "Window Shopping: Fashioning a Scholarship of Interdisciplinary Teaching and Learning." *International Journal for the Scholarship of Teaching & Learning* 5 (1): 1–10. https://doi.org/10.20429/ijsotl.2011.050126.

Wilson-Doenges, Georjeanna, and Regan A. R. Gurung. 2013. "Benchmarks for Scholarly Investigations of Teaching and Learning." *Australian Journal of Psychology* 65 (1): 63–70. https://doi.org/10.1111/ajpy.12011.

Yahlnaaw. 2019. "T'aats'iigang – Stuffing a Jar Full." *International Journal for Students As Partners* 3 (2): 6–10. https://doi.org/10.15173/ijsap.v3i2.4081.

Yeong, Foong May. 2021. "Using Asynchronous, Online Discussion Forums to Explore How Life Sciences Students Approach an Ill-Structured Problem." *Teaching & Learning Inquiry* 9 (1): 138–60. https://doi.org/10.20343/teachlearninqu.9.1.11.