

The Scholarship of Teaching and Learning

Essays by the 2017-18
Faculty Scholars





Finding Your Way Into the Scholarship of Teaching and Learning

For most faculty, involvement in scholarly teaching began long before their application to the Faculty Scholars program. For example, they attended inquiry groups and workshops offered by the Center for Advancing Teaching and Learning Through Research (CATLR). Many also participated in the Teaching Inquiry Fellows program prior to applying to become a Scholar, a sequence which CATLR recommends. Teaching Inquiry Fellows is a year-long cohort program in which participants draw upon learning science research to integrate or strengthen their evidence-based teaching practices.

For more information on the Teaching Inquiry Fellows program, contact Laurie Poklop at l.poklop@northeastern.edu.

For more information on the Faculty Scholars program, contact Gail Matthews-DeNatale at g.matthews-denatale@northeastern.edu.

INTRODUCTION

Gail Matthews-DeNatale, Ph.D.

Associate Director

Center for Advancing Teaching and Learning Through Research (CATLR)

The Scholars program supports faculty as they engage in deep investigation of their students' learning experiences, the concepts and assumptions of their disciplines, and the body of scholarly work that is relevant to their teaching practice. In partnership with CATLR facilitators, each year a new cohort embarks upon an intense journey of inquiry to reflect, read, discuss, and provide mutual support. As part of this experience, Scholars develop a Scholarship of Teaching and Learning (SoTL) project, which is an evidence-based investigation related to student learning. This project could be a close examination of a specific aspect of a course, a structured investigation of a particular teaching approach, or experimentation with new methods.

But what is the experience like for participants? What do they gain? Looking back on their time in the program, what are the challenges and benefits? In this booklet, you will read narratives by five participants from the 2017-2018 Faculty Scholars cohort. In each instance, the Scholar's journey involved interesting twists and turns. These are the stories of people who explored the roots of their curiosity about how learning works within their disciplines, identified puzzlements and bottlenecks, took a scholarly stance in analyzing student work, and often found that this process challenged them to question assumptions they brought with them into the program. The essays are not about providing conclusions; they depict the iterative process of engaged scholarship, in which every discovery leads to a new question.

Enjoy,

A handwritten signature in black ink that reads "Gail Matthews-DeNatale". The signature is fluid and cursive, with a long horizontal flourish at the end.



NATALIE BORMANN, Ph.D.

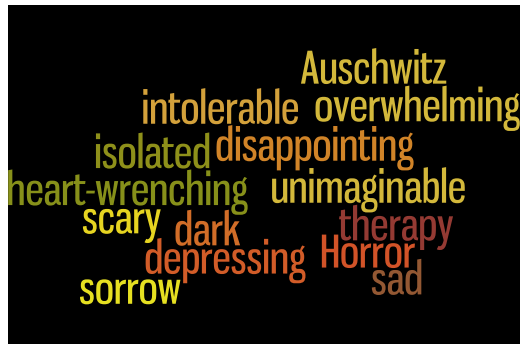
Teaching Professor, Political Science

What drew me to this SoTL journey is a deep care for the emotional well-being of my students in their study of genocide. When I began my work as a Scholar, I began with something very concrete in my discipline. I teach a difficult subject matter, Holocaust Studies, and I wanted to learn more about the impact of my teaching approach on my students, for example how the language and visuals that I use affect student emotions.

I assumed that this would be a closed project, with a fixed beginning and ending, in which I would discover specific findings. I now recognize that, as a scholar of my teaching and my students' learning, I am a work-in-progress. My study focus has extended beyond specific tools for pedagogy, such as words and images, to focus on the classroom environment and what kind of community I'm trying to create with my students.

I've become increasingly aware of the "messiness" in how we are affected emotionally by the difficult subject matter of genocide. Many dimensions are intertwined: what I bring to the classroom with my own experience, and how that affects my students; what my students bring to the classroom and my efforts to respect how they respond to the course experience; and the steps we take together to create a learning environment in which students can experience strong emotions in a way that is productive to their growth. The CATLR SoTL community has helped me navigate this messiness and find ways to integrate emotions as an essential part of a learning space where virtues, ethics, and relationships are honored, and where our responsibility to prevent genocide is salient. I am not just looking for an emotional response from students; I am concerned with the extent to which the emotions help them cultivate a capacity for compassion and ethical thinking.

As a scholar of genocide studies, I recognize that the emotional journey is as important as conveying the facts of what happened. It's important for the emotions (whatever they are) to be productive, to serve as a means for connecting to the suffering of others, so that students can apply what they have learned in future contexts.



Throughout the semester they experience horror, sadness, shock, and then somehow ideally derive something they want to take with them, to inform how they move through life as ethical and compassionate citizens and leaders, and to potentially engage in political action.

A key moment in my Scholars journey was when I identified a framework for an ethics of care that has allowed me to capture this triad of emotions, ethics, and content of genocide studies (Noddings, 2013). This framework gives me a vocabulary, literature, and pathways for helping my students develop a relationship with this challenging topic. In my syllabus, I now include a narrative on my course philosophy, and in the stated learning objectives and assessments, I invite students to reflect on and recognize their personal role and duty in the study of genocide.

The literature on contemplative pedagogy has also influenced my teaching (Barbezat & Bush, 2014). For example, I allow a few minutes of silence or read a passage of poetry before beginning a presentation, include mindful listening exercises, pause periodically for moments of contemplation during difficult conversations, and include opportunities for reflective writing. I soon noticed that most of my students began incorporating these strategies when they gave presentations in my course. This indicates to me that they find contemplative practices to be of value when teaching challenging topics and leading difficult conversations.

To further understand the impact of these practices, I surveyed students at the beginning and end of the term, and I am analyzing the responses to reflect upon the language students use to express themselves, looking for the extent to which the vocabulary of an ethics of care has been adopted by my students. In these surveys, my students describe the classroom environment as a safe space to think and talk about a difficult subject, a place where it is okay to have emotions. This indicates to me that my students have arrived at a place of comfort which creates a more affective, and consequently effective, learning environment.

As I began putting my syllabus together for this fall, I realized that the way I prepare for the term has changed. The key excitement in this journey for me has been a shift in how I think about my teaching. I have become a “slow teacher” who takes time to create in-between spaces for myself and for my students.

“The emotional journey is as important as conveying the facts of what happened.”



LUCY BUNNING, Ph.D.

Assistant Teaching Professor, NU Global

“I am not really a Northeastern student” is a refrain I have heard from several students in my international pathway program. This sentiment of not belonging has fueled my Scholarship of Teaching and Learning work this past year because it contrasts with my conviction that second language education is about gaining access to and participating in new discourse communities.

I teach English for speakers of other languages in a pathway program for international students with conditional acceptance to the university. While interaction in the target language is essential to language development (Gass, 2017), the feeling of “not really” that students have shared seems to be a barrier to their learning. In addition, I have found that “belongingness” has been linked to international students’ cross-cultural interaction and grades (Glass & Westmont, 2014).

In an effort to understand a slice of students’ experience, I am focusing on the discourse community of my classroom. While the concept of “willingness to communicate” (MacIntyre, 2007) has guided my work, the initial findings that have intrigued me most are the reasons why students decide not to speak in a given moment.

My project is grounded in stimulated recall reflection (Gass & Mackey, 2016), a process for eliciting students’ perspectives on their in-class participation. When students examine their own participation in class, they develop reflection and interaction skills and strategies that they can apply to other situations as well (Bernales, 2016). Engaging students in self-examination can be useful to me and to my students because it surfaces what is happening for them as they decide if, when, and how to contribute to a discussion.

Because my classes include multiple types of interaction, I investigated four different learning activities, each accompanied by a tool to elicit students’ perspectives on their participation. First, students did a “think/pair/share” in class,



after which they completed an “exit ticket” about how much they talked during the “pair” and “share” and why. Next, students made audio recordings of a conference with me about an assignment they were working on. They listened to the recordings and answered reflection questions about the conference. Then, students attended a cross-cultural interviewing event with another class and wrote a reflection about their experience. Finally, I videotaped students as they had a discussion in small groups in class. I had the student groups view the video, pausing every 30 seconds and writing in a journal, to recall what they were thinking and feeling at the time.

As I analyzed students’ reflections on their experience in these activities, I realized that I have been looking at “participation” much more narrowly than my students. I assumed that their decisions about participation would be predominantly individualistic (do I talk or do I not talk). However, my students were focused on the collective: listening, turn taking, not wanting to dominate the discussion, trying to find a way to chime in when another person in the group was dominating the discussion, looking for the right moment to say something, and choosing to stay quiet when it seemed like that best moment had passed.

“I assumed that [students’] decisions about participation would be individualistic ... However, they were focused on the collective.”

I now appreciate that “participation” for them is a complex process. I realize I had an expert blind spot that interfered with my ability to see all the reasons why participation, as I define it, is hard for them. Based on these preliminary findings I’m making modifications to my course, such as revising the discussion rubric to recognize the many dimensions of work involved in participation.

Gaining insight into my students’ perspectives on their own in-class participation has broadened my understanding of what is going on internally, thoughts and considerations, when they engage in discussion. As a result, I have developed greater empathy for my students.

Bernales, C. (2016). Towards a comprehensive concept of Willingness to Communicate: Learners’ predicted and self-reported participation in the foreign language classroom. *System*, 56, 1-12.

Gass, S. M. (2017). *Input, interaction, and the second language learner* (2nd ed.). New York, NY: Routledge.

Gass, S. M., & Mackey, A. (2016). *Stimulated recall methodology in applied linguistics and L2 research* (2nd ed.). New York, NY: Routledge.

Glass, C. R., & Westmont, C. M. (2014). Comparative effects of belongingness on the academic success and cross-cultural interactions of domestic and international students. *International Journal of Intercultural Relations*, 38, 106-119.

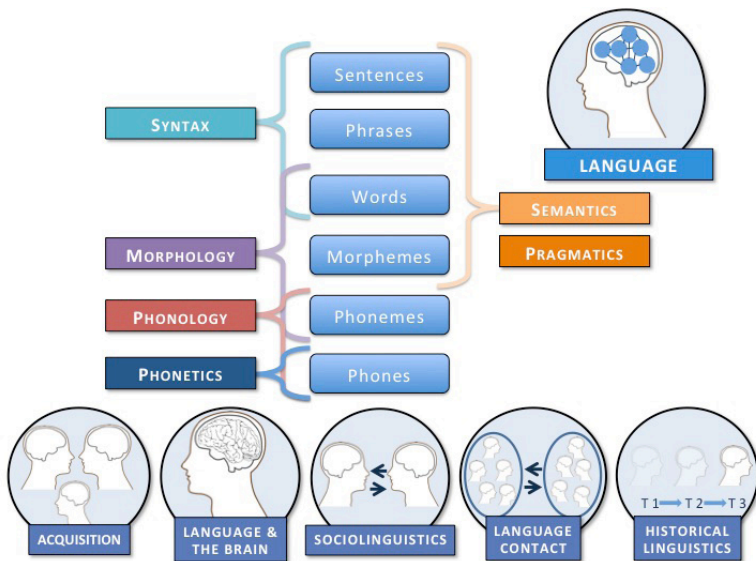
MacIntyre, P. D. (2007). Willingness to communicate in the second language: Understanding the decision to speak as a volitional process. *The Modern Language Journal*, 91, 564-576.



ADAM COOPER, Ph.D.

Associate Teaching Professor, Linguistics

My SoTL journey began in earnest when I undertook to design an online version of the Linguistics Program's introductory course. I'd taught the same course onsite several times, but had never taught online; so I relished the challenge of translating the successful aspects of the onsite version, leveraging the unique learning opportunities of a virtual classroom, and regularly assessing the fruits of my labor against evidence-based frameworks such as that of Riggs and Linder (2016).



This introductory course requires students to learn and apply an array of analytical techniques intended to uncover insights about language, at all levels of its structure. Students regularly demonstrate their progress in the form of weekly homework assignments. In teaching both onsite and online, I have come to appreciate how one early homework assignment in particular functions as a bottleneck: students are required to rigorously analyze linguistic data—in other words, to “think like a linguist” for the first time—and they display a range of abilities in doing so (Middendorf & Shopkow, 2017). Performance on the assignment typically falls below that of the preceding one, and student motivation and confidence can consequently take a hit.

Seeing such effects exacerbated online, my aim in this research project has been to explore how I might better scaffold the student experience as they work

towards tackling this assignment. In the spring of 2018 I taught two sections of the course. This has made it possible for me to experiment with implementing two distinct strategies to address the bottleneck, one in each course, and gather evidence of impact. The first involved practice work. The second involved personal consultations (following McGrath, 2014). To evaluate the effectiveness of these approaches, I have analyzed students' written reflections, tracked their performance, and also looked for evidence of impact on subsequent work.

“I may think [that] the worked example and problem are essentially the same, but have discovered that I underestimate how challenging it is for students.”

In reading my students' reflections, I realize how challenging it can be for a novice to transition from a worked example, even a good one, to working through a problem on their own. There needs to be some difference between the example and the assigned work so that students are challenged to solve something new. This is sometimes referred to as “desirable difficulty” (Bjork & Bjork, 2011). But if there is too great a difference between the example and the assignment it can be very difficult for students to make the transition. For example, the first step in linguistic analysis is to look for patterns in the speech data. How narrowly or broadly one should define the pattern depends on the specific set of data. As an expert, I may think that the worked example and the problem are essentially the same, but I have discovered that I underestimate how challenging it is for students to select the most appropriate constructs (labels, concepts) to apply during their analysis.

Based on these findings I have increased the level of scaffolding I provide, such as tips that anticipate potential problem areas. I am also making more of an effort to reinforce the position of a linguist's analytical approach to speech as data, within the larger context of why language is important to the human experience. So far I have seen a difference in the quality of students' work, and they are expressing more confidence in their reflections.

Bjork, E. L., & Bjork, R. A. (2011). Making things hard on yourself, but in a good way: Creating desirable difficulties to enhance learning. In M. A. Gernsbacher, R. W. Pew, L. M. Hough, & J. R. Pomerantz (Eds.), *Psychology and the real world: Essays illustrating fundamental contributions to society* (pp. 56-64). New York, NY: Worth Publishers.

McGrath, April L. (2014). Just checking in: The effect of an office hour meeting and learning reflection in an introductory statistics course. *Teaching of Psychology, 41*(1), 83-87.

Middendorf, J. & Shopkow, L. (2017). *Overcoming student learning bottlenecks: Decode the critical thinking of your discipline*. Sterling, VA: Stylus.

Riggs, S. A., & Linder, K. E. (2016). *Actively engaging students in asynchronous online classes*. Manhattan, KS: IDEA Center, Inc.



REBECCA RICCIO, M.A.

Khaled & Olfat Juffali Director, Social Impact Lab

Lecturer, Human Services Program and the School of Public Policy and Urban Affairs

As a social change educator, I want to challenge my students to grapple with the theoretical, practical, and ethical implications of inserting oneself into someone else's life intending to effect change. Integrating experiential philanthropy into my course makes this dilemma painfully real: students are tasked with choosing which of several worthy nonprofit organizations will receive a \$10,000 grant. Who are they, after all, to judge organizations addressing problems they may not have personally experienced? But judge they must, knowing their decision will have real-world consequences. They must steward scarce resources effectively and justly.

The students' transformative experience comes not from studying grant making, but from contemplating the implications of controlling scarce resources in the face of abundant need. Based on anecdotal evidence, I have always believed the process motivates them to cultivate their own humility, empathy, perspective-taking, and cultural agility.

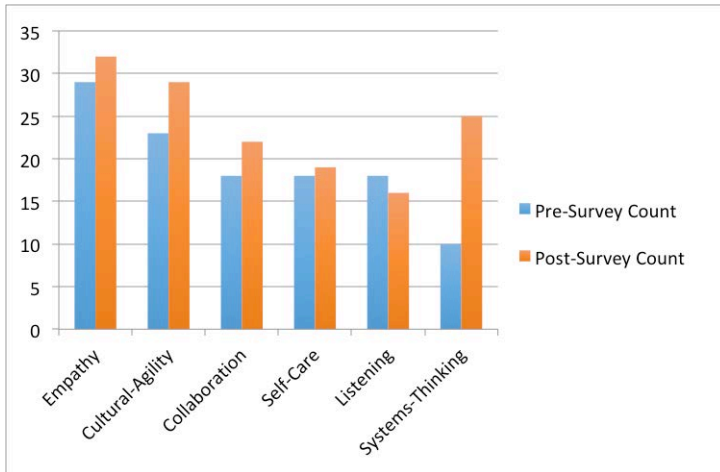
I was drawn to the Scholars program, and to the Scholarship of Teaching and Learning, because I am no longer satisfied by anecdotal evidence that in addition to learning course content, my students also engage in self-authorship. Baxter Magolda (2004) describes self-authorship as the capacity to "internally define a coherent belief system and identity that coordinates mutual relations with others."

I want to know if my students are mindfully stewarding their personal learning journeys. To pursue that inquiry, I have integrated a series of exercises and written reflections into the grant-making experience that provide a window, for myself and for my students, into their developing thinking about the skills and attributes they deem essential to effective, ethical change making within complex systems.

At the beginning of the course I ask my students to list what they think are the 10 most important competencies, skills, and attributes (CSAs) of a social change leader and to rate themselves on a 1-10 scale for each. At the end of the semester, they reassess their list and scores. Comparing the pre- and post-course assessment data revealed a significant change in students' perception of the importance of systems thinking.

"I have learned how to integrate my research questions into an authentic, improved learning experience for my students in real time."

The top 5 items on the initial list were empathy, cultural agility, collaboration, self-care, and listening.



Empathy and cultural agility were still perceived to be most important at the end of the class, but systems thinking jumped up to third place. I was pleased by this indication that students had begun to develop an understanding of the complex and dynamic nature of the environments in which social problems and their potential solutions emerge, a core learning outcome of the course and a defining element of the Social Impact Lab's ethos. One student reflected, "A good systems thinker is someone who has an open mind to solve problems in an innovative way, and is willing to acknowledge the true complexity of a system's landscape."

I was also pleased to discover that many students gave themselves lower scores on their CSAs at the end of the course, typically explaining that they had not gotten worse, but had over-estimated their performance to begin with. I believe these downward adjustments reflect authentic personal reflection that suggests they were thoughtful about the upward scores as well. In the next iteration of the class, I intend to refine the reflection prompts to determine whether students are connecting the changes in their CSAs to specific learning moments and activities within the course, or to their experience of the course as a whole. This will inform my thinking about how to amplify opportunities for personal growth and self-authorship throughout the semester.

The Scholars program has provided a space for me to reflect on my passion, curiosity, and convictions as an educator. I have learned how to integrate my research questions into an authentic, improved learning experience for my students in real time. I can't imagine going back to teaching without integrating research into my practice as an educator. After this experience, my learning and my students' will remain intrinsically linked.



STEPHANIE SIBICKY, Pharm.D.

Assistant Clinical Professor, School of Pharmacy

I recognized early in my academic career that—to become a better educator and preceptor to pharmacy students—I needed to know more about how people learn. By involving myself in the teaching and learning centers at my previous institution and at Northeastern through CATLR, I embarked on a journey to learn more about the Scholarship of Teaching and Learning.

I began by analyzing my teaching evaluations from my experiential pharmacy rotations. One of the most prominent themes was the desire for more constructive feedback. As part of my participation in CATLR's Teaching Inquiry Fellows program, I read *How Learning Works* (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010). I was drawn to the chapter on metacognition and immediately recognized that I could adapt the "Cycle of Self-Directed Learning" framework to create a tool for guided reflection with my pharmacy students.

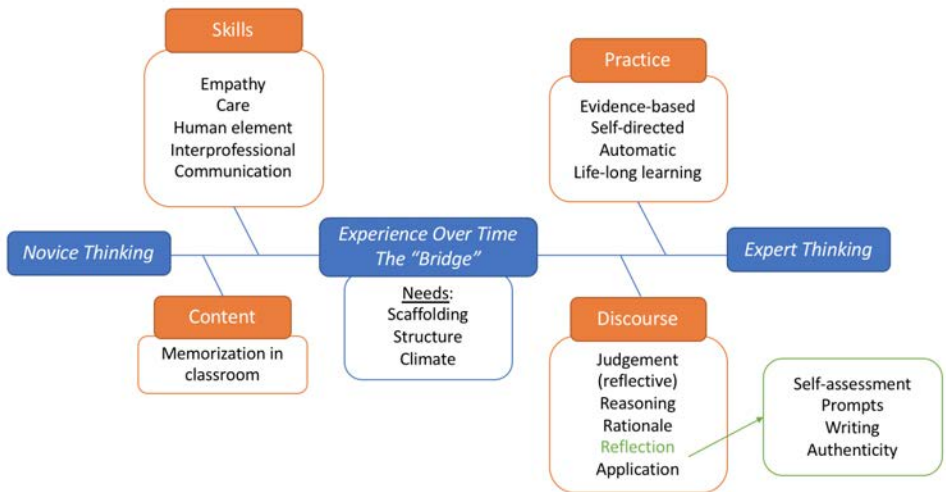
My reflection tool guides students through a process of assessing the task they performed, evaluating their use of knowledge and skills (what did or didn't go well), planning their approach for the next time they do something similar, identifying strategies that will help them enact that plan, and anticipating adjustments that might be needed (having a plan B).

I use the tool to embed student reflection into assignments they complete while on rotation, with the goal of increasing their metacognitive skills and capacity for self-directed learning. This structure also makes it possible for me to provide more meaningful feedback. As a Faculty Scholar, I am looking for evidence that students are crossing the "bridge" from novice to expert thinking. I want to know if they are becoming, in the words of Donald Schön, reflective practitioners (1983).

"I realized that what was important was evidence of expert thinking, not just the general patterns in thinking."

I have been collecting the reflections for a little over a year. I am now looking at ways to detect if students are thinking "like a pharmacist" by creating a rubric that is grounded in the experts' perspective. To do this, I met with 16 members of our faculty and posed the question, "What does it mean to think like a pharmacist?" They wrote their answers on sticky notes, with 2-3 comments per person. I am distilling those 40+ comments into a rubric that I will use as a lens for analyzing student reflections. For example, the faculty noted the importance of being detail-oriented, serving as an advocate for patients, and drawing upon research findings to support recommendations for optimizing medication.

I believe that this rubric will not only improve the quality of my reflection analysis, but also be useful to others in my profession.



Across the work I have done as a Scholar, there has been a transformation of my ideas about what I was doing. For example, I didn't anticipate creating a rubric as a lens for looking at reflections. I thought I would simply look for themes in my qualitative analysis of what students wrote. But I realized that what was important was evidence of expert thinking, not just the general patterns in thinking. The rubric helps me examine student reflections more critically, because it helps me determine if they are reflecting in the ways that are most important to the profession of pharmacy.

Some of the greatest benefits I have derived from the Scholars experience are the opportunity to focus my attention on something I care about, receive feedback from people at CATLR who specialize in SoTL, and also get input from my colleagues in the Scholars program. The connections we formed as a group, across disciplines, helped me bounce ideas off of people with a range of perspectives. I don't think I've ever thought so hard, and I left every meeting feeling incredibly energized.

Ambrose, S., Bridges, M., DiPietro, M., Lovett, M., & Norman, M. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass.

Schön, D. (1983). *The reflective practitioner: How professionals think in action*. London: Temple Smith.

2018-2019 COHORT



**Alessandra
Di Credico, Ph.D.**
Physics



**Andrew Mackie,
MPAS, PA-C**
Physician Assistant
Program



**Mary Lynn Fahey,
DNP**
Nursing



**Laurie Nardone,
Ph.D.**
English



**Kelly Garneau,
Ph.D.**
English



**Desislava Raytcheva,
Ph.D.**
Biology



David Hagen, J.D.
Criminal Justice,
Intelligence, and
Homeland Security



Katy Shorey, Ph.D.
Philosophy and Religion



**Michelle Laboy,
MUP, M.Arch.**
Architecture



Mark Sivak, Ph.D.
Art + Design and
Engineering

Please use this space to record your thoughts on possibilities for SoTL in your own practice.

What is most challenging or puzzling to you about your students and their learning?

How might the challenge or puzzlement be related to concepts and skills that are central to your discipline? How might it be related to the process of learning in general?



Northeastern University

*Center for Advancing Teaching and Learning
Through Research*

215 Snell Library
360 Huntington Ave
Boston, MA 02115

t: 617-373-3157

f: 617-373-7779

learning.northeastern.edu
learningresearch@northeastern.edu