

Research Article

"You Should Think About Teaching. You're Really Good at it": Instructors' Starting Points for Teaching Minoritized Students

Jillian Ives¹, Milagros Castillo-Montoya¹ and Kirsten Kortz²

¹ University of Connecticut

² Northern Essex Community College

Abstract

Few college instructors receive pedagogical training, yet they enter the classroom with experience and knowledge that informs the way they think about their capacity to teach. The starting points of the faculty teaching journey are often a neglected aspect of the educational development literature. This study examines pre-program data for where and how 10 U.S. college instructors developed their beliefs about their capacity for college-level teaching generally, and particularly their efficacy for teaching minoritized college students, as they entered a year-long professional development community. We found firsthand experiences and feedback, specifically from students, were powerful in shaping instructors' starting points, but differed for general teaching compared to teaching minoritized students. We also found instructors' starting points varied by gender and discipline. Considering the starting points of college instructors' beliefs about their capacity to teach has implications for educational developers in reducing barriers and developing programs to increase instructors' confidence.

Keywords: self-efficacy, confidence, college teaching, faculty development, equity

How do instructors who teach in higher education develop their beliefs about their capacity to teach? Many college instructors are not necessarily taught how to teach, so they may end up relying on their prior experiences and knowledge as *starting points* for teaching (Abreu et al., 2019; Nugent et al., 1999; Oleson & Hora, 2014). What we mean by starting points is not necessarily the career stage, but rather the prior experiences and knowledge that serve as a launching pad from which faculty start in improving their teaching. These starting points can be informed by established teaching practices in their disciplines (McNeill et al., 2022; Shulman, 2005; Starkey et al., 2023), non-academic roles and experiences (Oleson & Hora, 2014), feedback from colleagues and friends (Milner, 2002), their own experiences as a student (Oleson & Hora, 2014), and/or their perceptions and attitudes toward students (Ching, 2019; Garcia et al., 2020). Instructors could also have limited exposure to the varied prior knowledge and experiences that students with identities, experiences, and cultures different from their own bring to the classroom. This

Jillian Ives, <https://orcid.org/0000-0001-8080-070X>; Milagros Castillo-Montoya, <https://orcid.org/0000-0001-5057-2451>; Kirsten Kortz, <https://orcid.org/0000-0003-1322-7055>

The authors have no conflicts of interest to disclose. Correspondence concerning this article should be addressed to Jillian Ives, 249 Glenbrook Rd., Unit 3093, Storrs, CT 06269-3093, jillian.ives@uconn.edu

limited exposure can mean limited starting points about effective teaching for minoritized college students, such as first-generation college students (Smith & Lucena, 2016) and underrepresented students in STEM (Canning et al., 2019).

Essentially, starting points are important to understand because instructors' prior experiences and knowledge directly impact their beliefs about their teaching capacity, including their confidence for teaching minoritized college students. Understanding the starting points, rather than career stage, could position educational developers for starting where the instructor as a "learner" is at, thereby improving the effectiveness of educational development efforts. Only by knowing the starting points that inform an instructor's beliefs about their teaching capacity can we measure growth in efficacy, a common goal in educational development programs (e.g., Hakkola et al., 2020; Henson, 2001; Rodgers et al., 2014).

In our work on a year-long professional development research project with 10 U.S. college instructors, we got curious about these starting points and what they could tell us about how to support instructors who want to improve their teaching so that all students, and particularly minoritized students, can thrive in their classrooms. That is, we examined pre-program data for what served as *sources for instructors' self-efficacy* for teaching in general, and teaching minoritized students, more specifically. Self-efficacy is the concept of an individual's belief in their capacity to execute an action with a desired outcome (Bandura, 1986). This belief requires a source of prior experience to build capacity to execute an action, or source of self-efficacy. Therefore, understanding instructors' starting points as sources for their teaching efficacy offers a lens from which to understand the role of starting points in educational development.

Conceptual Framework

Various factors inform people's beliefs about their capacity to teach, also known as sources of self-efficacy (Bandura, 1977; Bandura, 1986; Bandura, 1997). We drew on three¹ of Bandura's four hypothesized sources of self-efficacy: (1) firsthand experiences (mastery experiences), which provide direct evidence about one's skills and abilities; (2) observational experiences (vicarious experiences), which provide evidence about one's skills and abilities by allowing a comparison for judgment; and (3) feedback experiences (verbal persuasion), which provide direct or indirect feedback through another's encouragement or advice. In other words, instructors hold prior teaching experience and prior teaching knowledge that inform their efficacy as a teacher. Self-efficacy has implications for motivation, persistence, and psychological well-being (Bandura, 1986). Here, we explore how past sources of self-efficacy can inform a person's current level of perceived efficacy.

Though the development of Bandura's theory did not begin with teachers, scholars have found it useful in examining K-12 teachers' beliefs about their teaching (e.g., Zee & Koomen, 2016). While higher education instructors draw from a variety of sources in shaping their teaching practices, we know little about the sources of self-efficacy for college instructors (Chang et al., 2011; Morris et al., 2017; Oleson & Hora, 2014), especially as it relates to viewing sources as a starting point rather than a time-bound career stage. For example, the literature indicates early career K-12 teachers and college teaching assistants have few firsthand experiences to draw on so rely upon other sources in their teaching (Johnson, 2010; Mills, 2011; Palmer, 2006; Tschannen-Moran & Woolfolk Hoy, 2007). Scholars have also found mediating contextual factors, such as fixed syllabi and structured curriculum, shape college instructors' efficacy broadly (Morris & Usher, 2011; Oleson & Hora, 2014; Phan & Locke, 2015). Lastly of note, we examined teaching in general

¹ We did not collect data on the fourth source, physiological experiences, which derives from the interpretation of bodily arousal and emotions.

and teaching minoritized students more specifically when examining sources of self-efficacy because self-efficacy is context and task specific (Tschannen-Moran et al., 1998). By minoritized, we mean students historically underserved in higher education who are categorized into a minority status based on identity rather than numerical representation (Gillborn, 2005; Harper, 2012).

Methodology

The project took place during academic year 2017–2018 at a persistently white research university in the northeastern United States with an increasingly racially minoritized student body. Between 2011 and 2021, the racially minoritized undergraduate student enrollment increased by 70%. After the study was approved by the local Institutional Review Board, we recruited instructors to participate in a year-long professional development project focused on “teaching through diversity” by emailing members of the university’s teaching center listserv. Therefore, the instructors who participated in the project potentially had some prior interest in improving their teaching generally given their involvement with the teaching center. We did not pre-define diversity but rather invited participating instructors to discuss how their ideas about diversity in their discipline informed their teaching, ideas about their students, and the improvement goals they wanted to set for themselves as teachers. While some instructors chose to focus on minoritized identities within their discipline (e.g., women in STEM), we, as project leaders, largely focused on minoritized racial and ethnic identities in the curriculum readings. Fourteen instructors initially attended the first meeting, but four ended up dropping out early in the year due to other commitments. The 10 instructors who completed the year-long project were full- and part-time faculty and graduate teaching assistants, and varied in background, identities, and disciplines (Table 1).

To examine their sources of teaching efficacy upon entering the year-long project, we drew on a subset of data from a larger embedded case study. An embedded case study is the method of having a larger unit of analysis, the professional development community, and internal cases, the individual instructors (Scholz & Tietje, 2002). The findings presented in this paper are based on data from a pre-interview and pre-survey to shed light on the starting points shaping their teaching self-efficacy at the onset of the project. For this reason, we do not focus on the professional development community and its outcomes here.

The pre-interviews focused on their teaching background and approach. Our interview protocol asked questions such as “Are there aspects of your students’ identities that you take into consideration in your teaching?” The interview also provided us with an opportunity to hear about the motivations, challenges, and personal experiences that shaped their teaching practice. For example, interview questions asked about how they developed their syllabus, and who or what influenced their teaching style. To compliment what we would learn from the pre-interview, participants also completed a pre-survey that asked participants to assess their level of competency for enacting specific pedagogical practices associated with teaching minoritized students. For example, one statement was: “I use students’ experiences as a ‘way in’ for teaching the content of my discipline.” The survey is not a validated instrument but offered us complimentary data to better understand instructors’ teaching efficacy.

To analyze the interviews, we developed inductive codes from writing case memos for each instructor, and deductive codes from our self-efficacy framework. After refining the codebook, we conducted first-cycle and second-cycle coding (Saldaña, 2016) using matrices. We compared the matrix summaries to the self-efficacy descriptive statistics of the survey scores to understand the instructors’ starting points (Saldaña, 2016). Datasets are not available due to the small sample size and the IRB approval we sought at the time of the study.

Table 1: Participant Characteristics.

	n
Total	10
Discipline Category	
STEM	5
Social Science	3
Humanities	2
Teaching Status	
Graduate Teaching Assistant	4
Full-time Faculty	3
Part-time Faculty	3
College Teaching Experience	
Novice (0–5 years)	5
Practiced (5–10 years)	3
Experienced (10+ years)	2
Gender Identity	
Woman	6
Man	4
Race/Ethnicity	
White	5
Asian	2
Multiracial	2
Latinx	1
Nationality	
U.S. Native Born	6
Non-U.S. Native Born	4

Firsthand Experiences and Feedback Shape Instructors' Starting Points for Teaching

We found participants' firsthand experiences and feedback, specifically from students, were powerful in shaping their starting points, but differed for general teaching compared to teaching minoritized students. Instructors started with some prior firsthand experience when considering diversity broadly but had limited experience with racial and ethnic diversity specifically. Further, when they attempted to teach in inclusive ways, some received challenging and negative student feedback, or lacked feedback on their teaching from minoritized students specifically. Instructors' starting points also varied by gender and discipline.

Firsthand Teaching Experiences Were Powerful Starting Points but Limited

Instructors' primary sources of information about how to teach in general came from their own firsthand experiences teaching, which ranged from prior experience as a teaching assistant in graduate school to prior industry or professional positions where they gained transferable skills related to teaching. For example,

Andres,² a STEM instructor, had prior professional experiences that led him to a teaching career. In one position he taught Microsoft Office to adult professionals, and in another position, he mentored students from a local university working as research assistants in his corporate lab. Both positions allowed him to gain transferrable skills for teaching, as he realized "I had to understand the things that I was teaching at a much deeper level than what I had understood before."

Despite the variety of firsthand experiences with teaching generally, however, participants had limited firsthand experiences when it came to teaching minoritized students. All participants indicated some starting points from one of their prior roles when considering diversity broadly; however, the experiences varied in quantity and content. Some participants had experiences with addressing diversity in their course content, and others had taught in classrooms with students of diverse social identities. However, overall, they had limited firsthand experiences teaching racially minoritized students.

The starting points of mostly the social sciences and humanities instructors included some firsthand experience drawing on diverse perspectives in how they framed the academic content they taught. For example, Miriam, a humanities instructor teaching majority-white classes, thought her discipline spoke to diverse issues and diversity in general. Miriam's prior experience included her effort to "bring in diversity" through her selection of readings and primary source material so that she had a "range of voices" other than the traditional dominant narrative presented in her discipline. In this way, Miriam had some firsthand experience with teaching related to diversity broadly, considering her use of inclusive teaching strategies to increase representation of marginalized voices in her course materials.

The starting points for several other instructors included firsthand experiences teaching in college classrooms with students from varied backgrounds in terms of students' nationality, language, gender (in STEM), or academic year/major. Susie, a humanities instructor, for example, taught a first-year writing course often taken by English-language learner international students. Her classes were often "95 percent Chinese" students, but she also noted a lack of diversity in other social identities as most came from privileged backgrounds. Kiara, a novice instructor, taught courses in the social sciences at two campuses, one rural and one urban. Kiara noted that while her courses at the rural campus would be "predominantly white," the same course at the urban campus had "more students of color." While a few instructors had prior firsthand experiences teaching racially minoritized college students at other campuses or institutions, most taught in predominantly white classrooms with diversity reflected by a variety of other social identities. Therefore, they had limited starting points in which to form their beliefs about their capacity to teach minoritized students inclusive of racially minoritized students.

Feedback was a Valuable Starting Point but Limited or Negative

Another powerful starting point for instructors' efficacy to teach was feedback from a variety of sources. For example, Mailyn, a social sciences instructor, offered examples of both supervisors and others giving her positive feedback on her teaching. Her partner observed her teaching when she was still a practitioner in the field, and told her, "You know, you should think about teaching. You're really good at it." She shared with us that before she received that feedback, she "had never thought about [teaching] before." Positive recognition and feedback raised her confidence in her capacity to teach generally. Similarly, during Andres's industry experience, he had people tell him "I really learned a lot from you, and this was an excellent time" which "contributed to me [moving to a] teaching" career.

² All instructor names are pseudonyms.

However, most of the instructors lacked feedback about their classroom teaching from a valuable source—colleagues and students. Kiara, previously mentioned, summed up the lack of feedback on her teaching when she said, “no one, even my advisor, no one has ever asked to see my syllabi. Which I think is probably a bad thing.” Mindy, a STEM instructor, noted the lack of feedback from students on her teaching in general. She often taught large lecture courses, where she found it more difficult to assess students’ engagement compared to her smaller courses due to the size and classroom seating arrangements. Yet, instructors valued student feedback as a starting point for their teaching efficacy, including indirect feedback, such as body language, and direct feedback through written evaluations.

For those whose starting points included the opportunity for feedback from students on their efforts to make their courses more inclusive in process or content, it was often a negative or challenging experience, especially for women instructors. For example, Mailyn engaged students in an assignment about mental health in various cultures in which she incorporated diverse examples and texts. She had a student provide written feedback that it “wasn’t [an] appropriate” assignment. Mailyn struggled with feedback from students who get “defensive,” so she shifted her teaching to avoid including some topics or texts “because I don’t wanna risk being in that kind of situation” when students “react really negatively to it.” Her starting point became teaching from a place of fear, which limited her teaching strategies.

Almost all of the women instructors also spoke of teaching practices they employed that mitigated the impact of gender bias in student feedback. Kiara, the social sciences instructor, found it difficult to “balance” voices in class discussion, noting a course where two men were the “dominant voices” and “it was silencing ... all the women and people of color.” Kiara recognized that students’ perceptions of her as a young woman instructor could be “seen as a weakness ... that wouldn’t be perceived if I was male.” Therefore, she would try to be “very strict ... and hard like the first couple of class periods” so students, men in particular, would not try to dominate the discussion. Therefore, Kiara’s starting point in fostering a more inclusive classroom environment for group discussion led her to adopt behaviors that she may not have relied on otherwise.

Some students, particularly STEM instructors, felt they lacked feedback on how their teaching impacted minoritized students. For example, John, a STEM instructor, noted how he had no direct or indirect feedback to know if he was “encouraging or discouraging the students that are coming from different backgrounds.” Instructors, especially in STEM fields, desired more feedback to better understand the impact of their teaching on minoritized students. Their starting point was a limited connection to students’ feedback, particularly from minoritized students, which restricted their ability to assess the impact of their teaching on these students. Thus, instructors were inhibited in developing their self-efficacy for teaching minoritized students prior to the start of the project.

Discussion and Implications for Practice

Our findings support current literature that instructors, who often lack pedagogical training, rely on firsthand experiences (Morris & Usher, 2011) and their lived experiences (Abreu et al., 2019; Oleson & Hora, 2014) as a source of teaching efficacy. However, most of the efficacy literature focuses on teaching in general, not specific to teaching minoritized college students. Our study offers initial insights into instructors’ starting points at the beginning of a professional development research project focused on improving their teaching for minoritized students. What we learned is that their starting points for teaching and even more so for teaching minoritized students are sometimes limited, challenging, or negative, and can differ by gender and discipline. We highlight three implications for educational developers as they consider instructors’ starting

points when designing programs, including understanding and valuing the prior experience and knowledge instructors enter with and the barriers and challenges they may face in further developing their efficacy to teach minoritized students.

Value Instructors' Firsthand Experiences that are Transferrable to Teaching

Our study offers nuance to the literature on teaching confidence and career stage. Scholars have found that novice instructors rely more on observational experiences as a source for their teaching efficacy due to lack of firsthand experiences (Johnson, 2010; Mills, 2011) and overall lack of confidence in their work (Dore & Richards, 2024). However, within our small group of instructors we found no difference in self-efficacy by career stage for our participants. The majority of the higher education instructors that participated in our project had circuitous routes to their current instructor roles, with many having teaching and teaching-related industry experiences. In fact, instructors in this study with firsthand experiences outside of predominantly white college courses considered race and ethnicity as they thought about diversity. Other instructors, without that experience, often discussed diversity more in terms of other social identities or in terms of their course content. So, instructors' firsthand experiences and the context of that experience informs their approach to teaching in classrooms with diverse social identities.

This insight leads us to suggest that educational developers create space in their training to explore and leverage instructors' industry and other professional experiences outside of academia as important firsthand sources of self-efficacy in teaching. For example, in collecting information about faculty participants prior to a training, educational developers can add questions to a survey that focus on prior non-academic roles and employment at other institutional types rather than solely career stage. Even more, this is an equitable approach to understanding teaching, as Gonzales (2018) indicates women, especially those who are racially minoritized, locate the origins of their faculty work in everyday contexts (e.g., life as women, family roles, etc.) more so than formal academic settings (refer also to Neumann & Peterson, 1997). Lastly, we recommend educational developers value the knowledge and experiences minoritized faculty bring to teaching minoritized college students (e.g., Gonzales, 2018; Sulé, 2011).

Context can Thwart Instructors' Self-efficacy, Particularly in STEM

Our findings support the literature that college instructors face barriers in trying to tend to equity in their teaching (Castillo-Montoya, 2020). One barrier that emerged in our study was the limited feedback from colleagues. Instructors typically have few opportunities to observe each other's teaching, even though peer observations can serve as a source of teaching efficacy (Morris & Usher, 2011; Phan & Locke, 2015). When there is a lack of feedback, it can often be interpreted as a negative thing and therefore lower teaching efficacy (Phan & Locke, 2015). We know from existing literature that peer feedback, observational or otherwise, is helpful for faculty to improve their teaching (e.g., Bolitzer, 2019).

Discipline also emerged as a contextual barrier to increasing teaching efficacy, particularly among STEM instructors. Scholars have found that STEM faculty are more likely to report a lack of knowledge on "multicultural teaching" as a barrier to enacting inclusive teaching strategies (Bigatti et al., 2012). Similarly, the STEM instructors in this study reported lower efficacy in their abilities to teach minoritized students based on a lack of feedback from those students as a perceived barrier.

Educational developers can consider the starting point of instructors' lower efficacy in teaching minoritized students as a reflection of institutional barriers or challenges rather than an individual deficit. To enhance instructors' confidence, we encourage educational developers to collaborate with departments

to facilitate more (low risk) opportunities for instructors to observe their colleagues, and to have colleagues observe their teaching and give structured feedback (Abreu, 2020; Bolitzer, 2019). For example, both Hendry et al. (2021) and Bell and Cooper (2013) provide models from peer observation programs at Australian universities to enhance faculty confidence. Institutions could also consider offering a lower teaching load during the first year of a faculty member's position, to provide time for observation of their teaching as well as opportunities for them to observe others. To further enhance instructors' learning of how to teach in inclusive ways, educational developers can provide asset-based trainings focused on a variety of approaches that support all students, but particularly minoritized students.

Along with opportunities for peer feedback, our findings indicate that students are an important source of feedback. As such, it may be helpful for educational developers to facilitate instructor feedback from students beyond the end-of-year evaluation forms. For example, supporting the administration of mid-semester student evaluations could help instructors reflect and adjust their pedagogy midcourse (Jang et al., 2013). Educational developers can also work more closely with their faculty by sharing disaggregated data from their courses and engaging in meaningful reflection about what those data indicate in terms of teaching improvement (Artze-Vega et al., 2023).

However, we also recognize the problematic nature of bias in student evaluations of teaching (Perry et al., 2014; Rodriguez et al., 2020) and colleague evaluation feedback (Zambrana et al., 2015), especially for instructors with minoritized identities. The role of student feedback in promotion and tenure may limit instructors' teaching strategies because of a fear of negative student feedback for untenured women and racially minoritized instructors (Han & Leonard, 2017). The limited racial and ethnic diversity among the faculty ranks combined with the lack of training on the "historical, structural, and institutional biases that have led to [that] underrepresentation" can result in ineffective or potentially harmful colleague evaluations (Zambrana et al., 2015, p. 67). Therefore, we suggest balancing student feedback with regular opportunities for high quality feedback from colleagues, peers, and supervisors who have a range of content, pedagogical, and teaching expertise particularly as it relates to teaching in classrooms with students who have diverse social identities.

Gender is a Salient Identity Shaping Teaching Efficacy

Feedback emerged as a central source of teaching efficacy particularly for women instructors. Previous studies have found that women instructors are committed to teaching generally (O'Meara et al., 2017) and value ways of teaching that engage minoritized students' prior knowledge (Castillo-Montoya & Ives, 2021). The women in this study often sought myriad feedback but also had limited feedback from colleagues and challenging or negative feedback from students about their efforts to teach in inclusive ways. Research shows that instructors often note student resistance as a barrier to teaching in inclusive ways (Bigatti et al., 2012; Ives, 2022). As women generally receive more biased student evaluations that question their integrity and authority (Perry et al., 2014; Rodriguez et al., 2020) and feel more negative emotions when responding to their student evaluations than men (Kogan et al., 2010), this could discourage women to further advance their inclusive teaching approaches.

Educational developers can consider the unique starting points of women instructors when creating programs and services (Gravett et al., 2023). For example, programming can provide support in developing and processing informal student feedback, and educational developers can work to provide structures to reduce harm in formal evaluations (e.g., summary format or prior review). Other scholars have suggested pre- and post-tests of student learning as a less biased way to evaluate student learning

(e.g., Stark-Wroblewski et al., 2007). Lastly, forming communities of practice for women instructors has proven to be an effective way to support women faculty, especially racially minoritized women, in their career development through the feedback and guidance of peer networks (Agosto et al., 2016; Murakami & Núñez, 2014). Educational developers can serve as a key stakeholder in mediating the impact of feedback as a source of women instructors' teaching efficacy.

Limitations

There are several limitations of this study. First, the participants self-selected into this specific community; therefore, their sources of and feelings about teaching are different because people do not attempt a task without feeling somewhat efficacious, or capable of success (Bandura, 1977). Secondly, the participant sample is relatively small and limited in social identities (e.g., race, gender), which is not a limitation for qualitative research but limits the applicability of the findings. Despite these limitations, we took measures to enhance the trustworthiness of our study including researcher triangulation and data triangulation.

Conclusion

In this case study, we examined the sources that 10 U.S. college instructors drew on to develop their beliefs about their capacity for teaching generally, and teaching minoritized students specifically. We found firsthand teaching experiences and student feedback were powerful sources of teaching efficacy but could be limiting or challenging. Firsthand and feedback experiences also differentially shaped confidence for women instructors and those teaching STEM disciplines. As college classrooms become increasingly diverse with students who have varied backgrounds including but not limited to racial and cultural diversity, it is important that we, as a field, consider instructors' starting points when trying to improve instructors' efficacy in teaching minoritized college students. We think this is an important endeavor regardless of efforts to discourage faculty from being attentive to inclusion in their teaching. Educators have the responsibility of teaching all students and that requires attention to all that students bring to their classroom, including their social identities and relevant knowledge and ways of knowing.

References

- Abreu, J. (2020). *Enacting and refining critical teaching: A multi-case study on criminology/criminal justice professors* (Publication No. 2474) [Doctoral dissertation, University of Connecticut]. <https://opencommons.uconn.edu/dissertations/2474>
- Abreu, J., Castillo-Montoya, M., & Kortz, K. (2019). Community college English instructors' perceptions of learning and enacting culturally-sustaining teaching strategies. *Journal on Excellence in College Teaching*, 30(1), 27–50.
- Agosto, V., Karanxha, Z., Unterreiner, A., Cobb-Roberts, D., Esnard, T., Wu, K., & Beck, M. (2016). Running bamboo: A mentoring network of women intending to thrive in academia. *NASPA Journal About Women in Higher Education*, 9(1), 74–89. <https://doi.org/10.1080/19407882.2015.1124785>
- Artze-Vega, I., Darby, F., Dewsbury, B., & Imad, M. (2023). *The Norton guide to equity-minded teaching*. W. Norton & Company.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.

- Bell, M., & Cooper, P. (2013). Peer observation of teaching in university departments: A framework for implementation. *International Journal for Academic Development*, 18(1), 60–73. <https://doi.org/10.1080/1360144X.2011.633753>
- Bigatti, S. M., Gibau, G. S., Boys, S., Grove, K., Ashburn-Nardo, L., Khaja, K., & Springer, J. T. (2012). Faculty perceptions of multicultural teaching in a large urban university. *Journal of the Scholarship of Teaching and Learning*, 12(2), 78–93.
- Bolitzer, L. A. (2019). I really wanted to attend but it never happened: Instructional development for adjunct faculty. *The Journal of Faculty Development*, 33, 69–76.
- Canning, E. A., Muenks, K., Green, D. J., & Murphy, M. C. (2019). STEM faculty who believe ability is fixed have larger racial achievement gaps and inspire less student motivation in their classes. *Science Advances*, 5. <https://doi.org/10.1126/sciadv.aau4734>
- Castillo-Montoya, M. (2020). The challenges and tensions in equity-minded teaching. *Change: The Magazine of Higher Learning*, 52(2), 74–78.
- Castillo-Montoya, M., & Ives, J. (2021). Instructors' conceptions of minoritized college students' prior knowledge and their related teaching practices. *The Journal of Higher Education*, 92(5), 735–759. <https://doi.org/10.1080/00221546.2020.1870850>
- Chang, T. S., Lin, H. H., & Song, M. M. (2011). University faculty members' perceptions of their teaching efficacy. *Innovations in Education and Teaching International*, 48(1), 49–60.
- Ching, C. D. (2019). Supporting Latinx students in Hispanic-serving institutions: An exploration of faculty perceptions and actions. *Journal of Latinos and Education*, 21(1), 39–58. <https://doi.org/10.1080/15348431.2019.1612398>
- Dore, E., & Richards, A. (2024). Empowering early career academics to overcome low confidence. *International Journal for Academic Development*, 29(1), 75–87. <https://doi.org/10.1080/1360144X.2022.2082435>
- Garcia, G. A., Koren, E. R., & Cuellar, M. G. (2020). Assessing color-neutral racial attitudes of faculty at Hispanic-serving institutions. *AERA Open*, 6(3), 1–14. <https://doi.org/10.1177/2332858420944906>
- Gillborn, D. (2005). Education policy as an act of white supremacy: Whiteness, critical race theory and education reform. *Journal of Education Policy*, 20(4), 485–505.
- Gonzales, L. D. (2018). Subverting and minding boundaries: The intellectual work of women. *The Journal of Higher Education*, 89(5), 677–701. <https://doi.org/10.1080/00221546.2018.1434278>
- Gravett, E. O., McCarty, L. L., & Bernhagen, L. (2023). The gendered nature of educational development in the United States. *International Journal for Academic Development*, 1–14. <https://doi.org/10.1080/1360144X.2023.2252794>
- Hakkola, L., Tso Chien, M., & Pelletreau, K. (2020). Exploring socialization and teaching self-efficacy through a community of practice for international teaching assistants. *Journal of the Scholarship of Teaching and Learning*, 20(3), 64–80. <https://doi.org/10.14434/josotl.v20i3.208718>
- Han, K. T., & Leonard, J. (2017). Why diversity matters in rural America: Women faculty of color challenging whiteness. *The Urban Review*, 49, 112–139. <https://doi.org/10.1007/s11256-016-0384-7>
- Harper, S. R. (2012). Race without racism: How higher education researchers minimize racist institutional norms. *The Review of Higher Education*, 36(1), 9–29. <https://doi.org/10.1353/rhe.2012.0047>
- Hendry, G. D., Georgiou, H., Lloyd, H., Tzioumis, V., Herkes, S., & Sharma, M. D. (2021). 'It's hard to grow when you're stuck on your own': Enhancing teaching through a peer observation and review of teaching program. *International Journal for Academic Development*, 26(1), 54–68. <https://doi.org/10.1080/1360144X.2020.1819816>

- Henson, R. K. (2001, January 26). *Teacher self-efficacy: Substantive implications and measurement dilemmas*. Paper presented at the Annual Meeting of the Educational Research Exchange, College Station, TX.
- Ives, J. (2022). *College students making sense of equity pedagogy in racially diverse STEM classrooms*. [Doctoral dissertation, University of Connecticut]. <http://hdl.handle.net/11134/20002:860695701>
- Jang, S. J., Tsai, M. F., & Chen, H. Y. (2013). Development of PCK for novice and experienced university Physics instructors: A case study. *Teaching in Higher Education, 18*(1), 27–39. <https://doi.org/10.1080/13562517.2012.678329>
- Johnson, D. (2010). Learning to teach: the influence of a university-school partnership project on pre-service elementary teachers' efficacy for literacy instruction. *Reading Horizons, 50*(1), 23–48.
- Kogan, L. R., Schoenfeld-Tacher, R., & Hellyer, P. W. (2010). Student evaluations of teaching: Perceptions of faculty based on gender, position, and rank. *Teaching in Higher Education, 15*(6), 623–636. <https://doi.org/10.1080/13562517.2010.491911>
- McNeill, R. T., Levya, L. A., & Marshall, B. (2022). "They're just students. There's no clear distinction": A critical discourse analysis of color-evasive, gender-neutral faculty discourses in undergraduate calculus instruction. *Journal of the Learning Sciences, 31*(4–5), 630–672. <https://doi.org/10.1080/10508406.2022.2073233>
- Mills, N. A. (2011). Teaching assistants' self-efficacy in teaching literature: sources, personal assessments, and consequences. *The Modern Language Journal, 95*(1), 61–80.
- Milner, H. R. (2002). A case study of an experienced English teacher's self-efficacy and persistence through "crisis" situations: Theoretical and practical considerations. *High School Journal, 86*(1), 28–35.
- Morris, D. B., & Usher, E. L. (2011). Developing teaching self-efficacy in research institutions: A study of award-winning professors. *Contemporary Educational Psychology, 36*, 232–245.
- Morris, D. B., Usher, E. L., & Chen, J. A. (2017). Reconceptualizing the sources of teaching self-efficacy: A critical review of emerging literature. *Educational Psychology Review, 29*(4), 795–833.
- Murakami, E. T., & Núñez, A. M. (2014). Latina faculty transcending barriers: Peer mentoring in a Hispanic-serving institution. *Mentoring & Tutoring: Partnership in Learning, 22*(4), 284–301. <http://dx.doi.org/10.1080/13611267.2014.945739>
- Neumann, A., & Peterson, P. L. (Eds.). (1997). *Learning from our lives: Women, research, and autobiography in education*. Teachers College Press.
- Nugent, K. E., Bradshaw, M. J., & Kito, N. (1999). Teacher self-efficacy in new nurse educators. *Journal of Professional Nursing, 15*(4), 229–237.
- Oleson, A., & Hora, M. T. (2014). Teaching the way they were taught? Revisiting the sources of teaching knowledge and the role of prior experience in shaping faculty teaching practices. *Higher Education, 68*(1), 29–45. <https://doi.org/10.1007/s10734-013-9678-9>
- O'Meara, K., Kuvaeva, A., Nyunt, G., Waugaman, C., & Jackson, R. (2017). Asked more often: Gender differences in faculty workload in research universities and the work interactions that shape them. *American Educational Research Journal, 54*(6), 1154–1186. <https://doi.org/10.3102/0002831217716767>
- Palmer, D. (2006). Sources of self-efficacy in a science methods course for primary teacher education students. *Research in Science Education, 36*(4), 337–353. <https://doi.org/10.1007/s11165-005-9007-0>
- Perry, A. R., Wallace, S. L., Moore, S. E., & Perry-Burney, G. D. (2014). Understanding student evaluations: A Black faculty perspective. *Reflections: Narratives of Professional Helping, 20*(1), 29–36.
- Phan, N. T. T., & Locke, T. (2015). Sources of self-efficacy of Vietnamese EFL teachers: A qualitative study. *Teaching and Teacher Education, 52*, 73–82. <https://doi.org/10.1016/j.tate.2015.09.006>

- Rodgers, R., Christie, J., & Wideman, M. (2014). *The effects of a required faculty development program on novice faculty self-efficacy and teaching*. Higher Education Quality Council of Ontario.
- Rodriguez, J., Glenn-Levin Rodriguez, N., & Freeman, K. (2020). Student evaluations of teaching: Phrenology in the 21st century. *Race Ethnicity and Education*, 23(4), 473–491. <https://doi.org/10.1080/13613324.2018.1538118>
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage.
- Scholz, R. W., & Tietje, O. (2002). *Embedded case study methods: Integrating quantitative and qualitative knowledge*. Sage Publications.
- Shulman, L. S. (2005). Signature pedagogies in the professions. *Dædalus*, 134(3), 52–59. https://www.amacad.org/sites/default/files/daedalus/downloads/Daedalus_Su05_Professions-and-Professionals.pdf
- Smith, J. M., & Lucena, J. C. (2016). Invisible innovators: How low-income, first-generation students use their funds of knowledge to belong in engineering. *Engineering Studies*, 8(1), 1–26. <http://dx.doi.org/10.1080/19378629.2016.1155593>
- Stark-Wroblewski, K., Ahlering, R. F., & Brill, F. M. (2007). Toward a more comprehensive approach to evaluating teaching effectiveness: Supplementing student evaluations of teaching with pre-post learning measures. *Assessment & Evaluation in Higher Education*, 32(4), 403–415. <https://doi.org/10.1080/02602930600898536>
- Starkey, L., Yates, A., de Roiste, M., Lundqvist, K., Ormond, A., Randal, J., & Sylvester, A. (2023). Each discipline is different: Teacher capabilities for future-focussed digitally infused undergraduate programmes. *Educ Technol Res Dev*, 71(1), 117–136. <https://doi.org/10.1007/s11423-023-10196-2>
- Sulé, V. T. (2011). Restructuring the master's tools: Black female and Latina faculty navigating and contributing in classrooms through oppositional positions. *Equity & Excellence in Education*, 44(2), 169–187. <https://doi.org/10.1080/10665684.2011.559415>
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23(6), 944–956. <https://doi.org/10.1016/j.tate.2006.05.003>
- Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: It's meaning and measure. *Review of Educational Research*, 68(2), 202–248.
- Zambrana, R. E., Ray, R., Espino, M. M., Castro, C., Cohen B. D., & Eliason, J. (2015). "Don't leave us behind": The importance of mentoring for underrepresented minority faculty. *American Educational Research Journal*, 52(1), 40–72. <https://doi.org/10.3102/0002831214563063>
- Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research*, 86(4), 981–1015.