Taking Teacher Inquiry into Higher Education: A Dialogue in Four Parts

Brianna L. Kennedy & Nancy Fichtman Dana

Published online: 06 Apr 2021.

Submit your article to this journal

View related articles

View Crossmark data

Routledge
Taylor & Francis Group

Taking Teacher Inquiry into Higher Education: A Dialogue in Four Parts

Brianna L. Kennedy[a] and Nancy Fichtman Dana[b]

[a]Utrecht University; [b]University of Florida

ABSTRACT

Practitioner inquiry methodology, applied in primary and secondary schools worldwide, provides a structure for systematic study of an instructor's own teaching practice in order to address a self-identified instructional dilemma. This methodology holds promise for improving teaching in higher education as well. In this dialogue, two faculty members at research institutions discuss, and give an example of, how practitioner inquiry can improve the scholarship of teaching and learning in higher education.

Higher education faculty balance demands to execute excellent teaching, produce cutting-edge research, and provide service to their fields. Many have not received training to be good teachers, but even those who have can find it challenging to address authentic teaching dilemmas that often emerge in the college classroom. This challenge stems from the absence of a structure to do so that acknowledges teaching as intellectual work. In this paper, we illustrate how a methodological approach called practitioner inquiry, applied world-wide in K-12 contexts, can bring a research lens to college teaching and provide a structure for university faculty to focus on, and improve, teaching dilemmas at institutions of higher education, and in the process, intellectualize one's teaching efforts.

Rooted in the work of John Dewey (1933), popularized by Kurt Lewin in the 1940s (Adelman 1993) and applied to the field of education shortly thereafter by Stephen Corey (1953), practitioner inquiry is defined as the systematic and intentional study of a teacher's own practice and has been used in K-12 contexts for decades. Inquiry consists of cycles of continuous improvement that contain the following components:

- posing a question about teaching practice;
- collecting and analyzing data to gain insights into the question posed, along with reading relevant literature;

- taking action to make changes in teaching practice based on new understandings developed during inquiry; and
- sharing findings with others (Dana & Yendol-Hoppey, 2020).

Although the foundational texts describing the methodology of practitioner inquiry position it as applicable to K-12 contexts. Cochran-Smith and Fries (2005) suggest that the methodology is also appropriate for university instructors who seek to systematically improve their teaching. Teacher education has particularly been a field where higher education faculty members have engaged in rigorous examination of their teaching (Korthagen 1995; Loughran 2004). Despite the fact that higher education faculty in the field of teacher education enter college teaching with experience teaching in K-12 contexts, they experience challenges adapting their knowledge of teaching from this context to teaching adults in a university course. As faculty in the field of teacher education who have applied the process of inquiry to higher education, in this piece, we provide an introduction to and illustration of the ways inquiry can work in higher education by presenting a dialogue between the two of us. In so doing, we offer one strategy to reflect upon and improve teaching that all higher education instructors can use regardless of field or discipline. Parts of the dialogue have been fictionalized for readability, but the description of the study and the evidence presented are actual.

CONTACT Brianna L. Kennedy ✉ b.l.kennedy@uu.nl 📧 Utrecht University, Heidelberglaan 1, Utrecht, 3508 TC Netherlands.

Characters

BRIANNA: A faculty member in a teacher education department focused on social justice at a research university; recently assigned to teach the course *Effective Teaching and Classroom Management in the Secondary School* for pre-service teachers. Her course typically enrolls 20 to 30 students primarily born in the U.S. from White middle class backgrounds. Fewer than 5% of the students come from nondominant ethnic or socioeconomic backgrounds.

NANCY: A faculty member in a teacher education department at another research university and former colleague of Brianna's who has researched the process of inquiry in K-12 teaching contexts.

Part I

(Brianna and Nancy run into each other at a conference and sit down to catch up. After discussion of their latest research projects, the conversation moves to teaching, and Brianna's face reveals bewilderment as she begins to describe one of her current courses.)

BRIANNA: At first I was so excited to teach this course, but it doesn't seem like my students are grasping the main concepts. In the teacher education program, we want teacher candidates to understand the inequalities that exist in our public school system and how they are a direct consequence of societal inequalities related to healthcare, housing, childcare, school funding, teacher quality, curricula, and wealth distribution (Boykin and Noguera 2011; Kumar and Lauermann 2018; Ladson-Billings 2007; Milner 2010, Welner and Carter 2013; Villegas and Lucas 2002; Zygmunt and Clark 2016). In my class in particular, I want my students to understand issues of inequity and power so that when they become teachers they can work toward social justice rather than unconsciously reproducing the status quo (Sensoy and DiAngelo 2017). And I want them to be able to do that using excellent teaching practices.

NANCY: Well, what makes you think they are not learning those things?

BRIANNA: That's a good question. One of the main projects for the class is that the teacher candidates work in small groups with one secondary school student from a racially or socioeconomically marginalized background. The group's task is to get to know that student and their family. The group also needs to interview a teacher and observe the student at school.

The goal is for the teacher candidates who are mostly from White, middle class backgrounds to understand issues in the student's home and school lives from the student's and family's perspectives. But it seems like what is happening is that the teacher candidates' original perspectives of blaming students and families for challenges at school are being reinforced instead of changed (Kennedy and Soutullo 2018; Ladson-Billings 2007; Valencia 1997, 2010). They don't seem to see the students' and families' strengths or understand their difficulties or to understand the social structures that have led to those difficulties. Instead, the teacher candidates seem to adopt the exact perspective that I hope to challenge in the class, the perspective that blames children and families for school failure without considering multiple social and school-related factors that contribute to the situation (Weiner 2006). I'm not sure why the project is leading to this reinforcing of stereotypes rather than challenging them or why students do not transfer the information from other class materials and activities to this one.

NANCY: It sounds like you have a problem of practice.

BRIANNA: What's a problem of practice?

NANCY: It's a dilemma that you have as a teacher. These dilemmas naturally lead teachers to problematize practice. For example, you are problematizing ways to shift the deficit narrative your mostly White, middle class students seem to hold about children from racially or socioeconomically marginalized backgrounds.

BRIANNA: Well, then, yes! I have a problem of practice. Do problems of practice have solutions of practice?

(They laugh.)

NANCY: As a matter of fact, they do! While there are numerous ways to focus on and improve one's teaching, I have seen teachers in primary and secondary education have great success with a process called practitioner inquiry, and I think higher education faculty could really benefit from it too.

BRIANNA: Oh, right! I remember seeing one of your presentations on practitioner inquiry in K-12 contexts and was intrigued by the process, but I never thought of applying it to my own higher education teaching.

NANCY: Practitioner inquiry can be an excellent methodology to address problems of practice in

higher education teaching by combining the scholarships of discovery and teaching (Boyer 1990). In fact, in his book *What the Best College Teachers Do,* Ken Bain's (2004) analysis of over 60 exemplary college teachers across a dozen universities revealed that all of the professors studied "had some systematic program … to assess their own efforts and to make appropriate changes" (p. 19). Practitioner inquiry can serve that purpose.

BRIANNA: What do you think I should do first?

NANCY: The first step is to frame your problem of practice as a researchable question. It sounds like you are close to being able to do that. Do you think so?

BRIANNA: Well, my overarching goal is to shift my students' mindsets related to working with children from racially and socioeconomically marginalized backgrounds. Then, I want them to be able to build on those mindsets as they make decisions related to their own teaching and as they interact with children and families. I have several assignments that I've created to accomplish that, but those assignments do not seem to lead to the outcomes I have hoped for.

NANCY: Do you think the disconnection you describe is related to your course objectives and choice of assignments?

BRIANNA: I suppose that's the question. Maybe I could more formally frame it like this: In what way can I appropriately structure course activities to challenge the negative perspectives that students from White, middle class backgrounds in my *Effective Teaching and Classroom Management in the Secondary School* course hold about children from racially or socioeconomically marginalized populations?"

NANCY: That's the idea, and you can continue to refine your question as you work through the inquiry process. Now that you have articulated a researchable question about your teaching, the next step in the inquiry cycle is to collect and analyze data. Data collection in practitioner inquiry is best thought of as capturing the action, learning, and thinking that has, and is, happening in one's class. Whenever possible, data collection strategies should emerge from what is a natural part of the teaching act, like the generation of student work, so your students' assignments themselves can be a valuable source of data to analyze. How many semesters have you included the small group project in your course?

BRIANNA: This is the second semester, and I felt uncertain about the assignment last semester, too.

NANCY: Did you keep the students' assignments from last semester?

BRIANNA: Yes, my students submit all of their papers online, so I have access to my students' work from every class.

NANCY: Terrific, so your next step then is to systematically analyze your students' prior work in order to characterize their thinking during and after this group project. This could be insightful and also help you better understand your dilemma and the question that is emanating from it. What I have noticed in my work with teachers is that it's easy to focus on a few anecdotes and think that if it is true for one student or in one case, it is true for everyone.

BRIANNA: That's a good point. I could see how a systematic review of my students' assignments could lead to some insights and perhaps to a new way to approach this assignment.

Part II

(Nancy and Brianna meet by video six weeks later to discuss Brianna's engagement in practitioner inquiry.)

NANCY: Last time we left off, you were going to collect and analyze data as a second step in your inquiry cycle. What did you find?

BRIANNA: It was interesting to shift from the lens of reading my students' papers for the purposes of assigning them a grade to reading for the purpose of discovering what I could learn from them as a researcher of my own teaching. I learned that the teacher candidates in my class had three primary misconceptions that I still need to address the next time I teach the course. First, over half of them did not define culture as being historically or sociologically rooted and therefore did not understand or value perspectives and behaviors of students from nondominant backgrounds. Second, the course assignment did help students to improve teaching practices by making their content and instruction more relevant, but it did not push the students to challenge unjust social structures. Only a handful of students discussed injustice in their assignments. Third, about one-third of the assignments included specific examples of students applying their own cultural lenses to their students' lives without being aware of it. These three issues result from some failure in the course with regard to

helping students understand and think more critically about culture, power, and privilege. I'm not really sure what to do next.

NANCY: Well, this is a really great start. The next step in practitioner inquiry is to consult the literature. While, as academics, we are completely comfortable reviewing literature in relationship to our research agendas and do it all the time, we often don't think of consulting literature in the same way in relationship to our teaching. When using practitioner inquiry as a methodology to study teaching, literature can actually be considered a form of data as we consult what is written about our dilemma. There are some great journals that focus on college teaching that could be a resource, not to mention journals in our field as well. I suggest that you focus your literature review on teaching practices that have successfully changed student attitudes around culture, power, and privilege.

BRIANNA: Great idea! This would be a nice opportunity to conduct a literature review on the topic. I could engage graduate students in the project and then not only would the results help me with my course revision, but we could also publish the review and disseminate our findings to other faculty members who also face this dilemma. I know from conversations with colleagues that this is a common challenge among teachers of this content area.

(Brianna pauses for a moment in consideration of the entire conversation so far, and then continues the dialogue.)

BRIANNA: I like the way this is shaping up. It feels good to have a systematic plan to address something that is troubling me about my teaching. I'll keep you posted.

NANCY: I think you're on to something that could be really impactful. I can't wait to hear about the next steps.

Part III

(Nancy and Brianna meet again by video two months later. Brianna updates Nancy on her progress.)

BRIANNA: I really enjoyed being able to dig into the literature and read about other instructors who have taught a similar course and had similar experiences. I think this literature review will turn out to be the critical piece in helping me improve the course. I read a lot of literature for my research but it had not occurred to me to consult it for my teaching. What I found reflected what I had also concluded during my analysis of my students' previous assignments: Students' assumptions and deeply held beliefs about marginalized groups were reinforced when their encounters with these individuals, or with socially unjust situations, remained incomplete (Gorski 2012; Kennedy et al., 2021; Zygmunt and Clark 2016). In the literature review, the instructors who found success in similar courses included assignments and reading that required students not only to think critically but also to reflect deeply and meaningfully on challenging issues such as White privilege before going out into the field for further study (Acquah and Commins 2015; Adler 2011; Owen 2010). This reflection process required time and also needed to be a primary focus of the class. On the one hand, this point was not that new or surprising. Of course it makes sense that students need time to reflect on difficult course content. But on the other hand, I was not really transferring that understanding adequately to the structure of my course. I would say that the literature review led to a development of my own pedagogical content knowledge (Shulman 1987).

NANCY: I love hearing that. Pedagogical content knowledge is such a useful idea, that it's not enough to know pedagogy, or how to teach, and that it's not enough to have content knowledge, but that teachers specifically need to understand how to teach particular content. That means that you, as a teacher, need to know how your students learn particular content, not just what the content is. How would you say that your pedagogical content knowledge changed?

BRIANNA: I would say that I am now conceptualizing students' mastery of the course content in stages, which I had not considered before. These stages particularly apply when the course goals target both cognitive and affective changes (Iseminger et al., 2020). The first stage targets a cognitive change, a development in knowledge. Students need to know some basic terms just to be able to talk about these ideas. The second stage supports affective development. Students need time and effective instructor scaffolding to process the difficult content and what it implies about their own positions and identities. I think this stage is particularly relevant for the challenging material related to racism, power, and privilege. Then the third stage addresses the integration of the cognitive and affective learning and supports the transfer of concepts. In this stage, students encounter new situations and apply the ideas to these new situations. And finally, the fourth stage is where we can start to incorporate these ideas into students'

Brianna's Conceptual Model of Student Learning
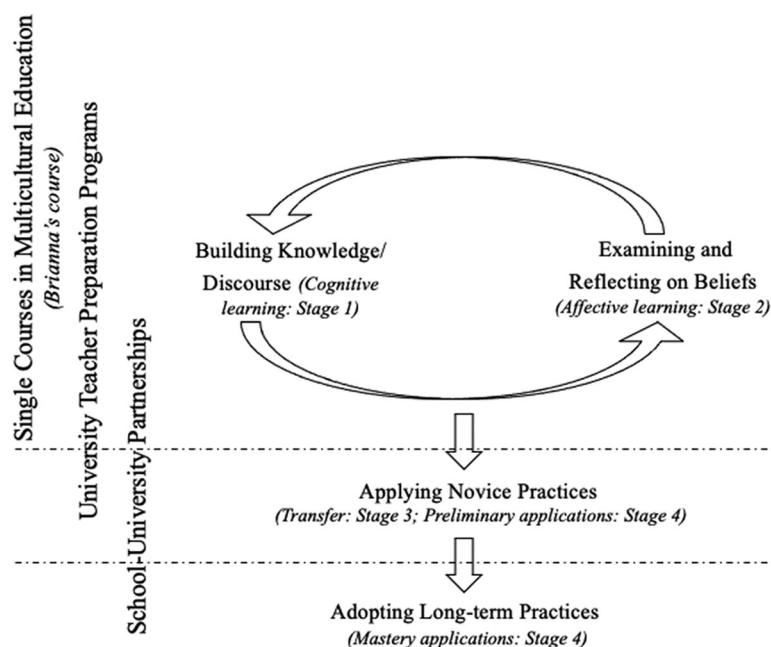
Figure 1. Brianna's conceptual model of student learning.

own classroom teaching. I drew a model to help me further theorize and conceptualize students' learning process in this content area (see Figure 1).

I think I have been rushing through the first stage (i.e. Building Knowledge), leaving out the second stage (i.e. Examining and Reflecting on Beliefs), and jumbling together the third (i.e. Applying Novice Practices) and fourth stages (i.e. Adopting Long-Term Practices). So this literature synthesis has been very useful for me to conceptualize my students' learning process more clearly.

NANCY: How do you think that the clarity you are expressing about these four stages (cognitive learning, affective learning, preliminary applications, and mastery application) will help you revise your course and resolve your teaching dilemma?

BRIANNA: Well, when I thought about how to apply these findings to my situation, at first I felt conflicted. I want to prepare the teacher candidates to address social injustice by providing them with these learning activities but I also know that the teacher candidates' focus is on learning to teach and that they may see reading and writing about issues of social injustice as a distraction. But when I think about their learning as moving through four stages, it helps me to set more realistic and narrow goals for the course. The next time I teach the course, I will focus heavily on teaching students basic terms, so mastering stage one, and helping them to begin the reflection process of stage two. In

order to be responsive to their own goals of learning to teach at this moment in their educational trajectories, which is focused on what I am calling stage four, I will use class materials, examples, and assignments that are all quite practical and focused on classroom teaching. To implement these shifts, I will change the class assignments to align more directly with the foundational cognitive mastery of concepts and the preliminary steps toward affective change—stages one and two of my model. To support these objectives, I will more tightly couple the assignments with the course readings and activities and improve in-class scaffolding. I will work on the details of the course revision and try it out in the upcoming term.

NANCY: That sounds great, and will naturally lead to an analysis of how it went. Be sure to collect evidence.

Part IV

(Brianna asks Nancy for an urgent video chat in order to share her outcomes.)

BRIANNA: Guess what? I'm so excited. I put my new pedagogical content knowledge to work by revising my course as we discussed. I focused the course on what I called "anchor concepts," such as *funds of knowledge*, *social justice*, *deficit thinking*, and *resistance*, and built the activities and assignments around those. I thought this would be a particularly good way to hone in on students' cognitive developments in

stage one. I also gave a midterm and final exam to further reinforce students' attention to, and learning of, the anchor concepts, which I then hope will be built upon as they progress through their teaching program and beyond. Listen to what this student wrote on his final exam, where I asked them to reflect on their own learning during the course, which I hoped would move them into the reflection stage, or stage two, that I mentioned before:

> The first anchor concept from our readings, "It's My Job," is still a concept I am gaining a deeper understanding of. In my midterm, I commented that it was not practical in the real world. During a field experience course this semester, I saw a student being left behind because the teacher gave up on him. The kid was smart. He needed motivation. I felt an ache that I still feel writing this. That is a life. That is potential thrown away because of the limit placed on him. You can't save everyone, but you have to try! Deficit thinking [the second anchor concept in our course] ties in to my preconceived notions before taking the class. I thought students who do not do their work and acted out were problems. I realize it is not that simple.

This is just one of many examples. Ninety percent of the students showed mastery of the anchor concepts, which is the cognitive change I was hoping for. Isn't it great, Nancy? By narrowing and simplifying the objectives, and more tightly aligning the activities and content, I was actually successful at moving students through the foundational stage and into the reflection stage. Comments like these show that we've also paved the way for applications to their future teaching. I feel much better about the class after completing this inquiry cycle. I can't wait to share these insights with my colleagues.

NANCY: That is so great, Brianna, what a success. The discoveries you have made about your teaching are a testament to the power practitioner inquiry holds to improve college teaching and learning. I hope engagement in inquiry will become a natural part of your collegiate teaching practice from here forward.

BRIANNA: Indeed. I'm so pleased with the process and results.

Epilogue

(Brianna and Nancy meet months later at a conference and continue their dialogue about inquiry. Brianna has a question she has been wanting to ask Nancy.)

BRIANNA: Well, actually, I do have another question for you. This inquiry process really took a lot of time, and I know it made my teaching better, but I feel really conflicted about the time demands associated with continuing to engage in the process. As you well know, we are at research universities and the gold standard is on publications in top journals and less value is placed on good teaching (Chalmers 2011). I feel a sense of pressure about needing to convince my colleagues of the value of this type of scholarship.

NANCY: That's an understandable and common concern. But remember that sharing the findings of an inquiry cycle is an important final step in the process, and you can publish your work. Your colleagues will at least recognize that you've published and give you credit for that.

BRIANNA: That's a great idea. But what journals would be interested in this sort of work?

NANCY: The journals *Teaching in Higher Education* and *College Teaching* focus on teaching in various disciplines in higher education. *Teaching and Learning Inquiry* publishes rigorous practitioner inquiries conducted in higher education. And there are several journals in our own field that would publish research on one's own teaching such as *Action in Teacher Education*, *Studying Teacher Education*, and the *Journal of Practitioner Research*. There are journals with a similar focus in other fields as well. In terms of whether other scholars view practitioner inquiry as real research depends on their research paradigm (Haigh and Withell 2020).

BRIANNA: You know, I was thinking about that as I was justifying for myself why I wanted to proceed with inquiry. I was thinking about how I often have to justify my interpretive, qualitative research studies to scholars who tend to use post-positivist research paradigms (Lincoln, Lynham, & Guba, 2018). I see value in a range of research paradigms to address different types of questions and social problems (Leibowitz and Bozalek 2016), and practitioner inquiry is a valid paradigm for this type of question. So, it turns out that practitioner inquiry is *real* research when evaluated by these standards. But do you really think that research institutions could place a high value on teaching and on the improvement of teaching through practitioner inquiry?

NANCY: Yes, indeed. Many universities are now advocating for teachers to ask good research questions about their teaching and use practitioner inquiry to

impact and improve student learning. I'm currently leading an effort at my institution to do just that. We are rolling out a campus-wide initiative to transform the undergraduate general education coursework experience. In sum, this initiative is about transforming large undergraduate general education lecture courses to smaller, discussion-based seminars that ask students to grapple with challenges they will face as thoughtful adults navigating a complex world. As you might imagine, as faculty shift from delivering large, lecture-based courses to facilitating active learning of smaller groups of undergraduates, they have many questions that the process of inquiry can address. Some that we have discussed already include:

- How is the experiential learning component of my course developing students' critical thinking skills?
- What discussion facilitation techniques engage first year students with the essential questions that frame my course?; and
- How can I utilize a teaching assistant in a small class setting to impact the *learning* of first year students, rather than simply to grade assignments?

The process of inquiry has been introduced as a systematic way to support faculty in understanding how well their efforts are working to transform the undergraduate general education coursework experience for our students. Our goal is for faculty inquirers to publish the research they produce on their teaching in some of the journals I mentioned earlier. I'm looking forward to watching the powerful ways inquiry improves teaching on our campus, as well as to our continuing conversations about the application of practitioner inquiry to higher education.

References

Acquah, E. O., and N. L. Commins. 2015. "Critical Reflection as a Key Component in Promoting Pre-Service Teachers' Awareness of Cultural Diversity." *Reflective Practice* 16 (6): 790–805. doi: 10.1080/14623943.2015.1095729.

Adelman, C. 1993. "Kurt Lewin and the Origins of Action Research." *Educational Action Research* 1 (1):7–24. doi: 10.1080/0965079930010102.

Adler, S. M. 2011. "Teacher Epistemology and Collective Narratives: Interrogating Teaching and Diversity." *Teaching and Teacher Education* 27 (3):609–18. doi: 10.1016/j.tate.2010.10.015.

Boyer, E. L. 1990. *Scholarship Reconsidered*. San Francisco, CA: Jossey-Bass.

Boykin, W., and P. Noguera. 2011. *Creating the Opportunity to Learn: Moving from Research to Practice to Close the Achievement Gap*. Alexandria, VA: ASCD.

Chalmers, D. 2011. "Progress and Challenges to the Recognition and Reward of the Scholarship of Teaching in Higher Education." *Higher Education Research & Development* 30 (1):25–38. doi: 10.1080/07294360.2011.536970.

Cochran-Smith, M., and K. Fries. 2005. "Researching Teacher Education in Changing Times: Politics and Paradigms." In *Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education*, edited by M. Cochran-Smith and K. M. Zeichner, 69–110. Mahwah, NJ: Lawrence Erlbaum Associates.

Corey, S. M. 1953. *Action Research to Improve School Practice*. New York: Teachers College Press.

Dana, N., and D. Yendol-Hoppey. 2020. *The Reflective Educator's Guide to Classroom Research*. 4th ed. Thousand Oaks, CA: Corwin.

Dewey, J. 1933. *Democracy and Education*. New York: The Free Company.

Gorski, P. C. 2012. "Instructional, Institutional, and Sociopolitical Challenges of Teaching Multicultural Education Courses." *The Teacher Educator* 47 (3):216–35. doi: 10.1080/08878730.2012.660246.

Haigh, N., and A. J. Withell. 2020. "The Place of Research Paradigms in SoTL Practice: An Inquiry." *Teaching & Learning Inquiry* 8 (2):17–31. doi: 10.20343/teachlearninqu.8.2.3.

Iseminger, S. I., H. A. Diatta-Holgate, and P. V. Morris. 2020. "Describing Students' Intercultural Competence after Completing a Cultural Diversity Course Online or Face-to-Face." *Teaching & Learning Inquiry* 8 (2):114–27. doi: 10.20343/teachlearninqu.8.2.8.

Kennedy, B. L., and O. Soutullo. 2018. "We Can't Fix That: Deficit Thinking and the Exoneration of Educator Responsibility for Teaching Students Placed at a Disciplinary Alternative School." *The Journal of at-Risk Issues* 21 (1):10–23.

Kennedy, B. L., M. P. Lopez, and N. Hagler. 2021. *Effectively Teaching a Single Course in Multicultural Education to Pre-Service Teachers [Manuscript Submitted for Publication]*. Department of Education, Utrecht University.

Korthagen, F. A. J. 1995. "A Reflection on Five Reflective Accounts." *Teacher Education Quarterly* 22 (3):99–105.

Kumar, R., and F. Lauermann. 2018. "Cultural Beliefs and Instructional Intentions: Do Experiences in Teacher Education Institutions Matter?" *American Educational Research Journal* 55 (3):419–52. doi: 10.3102/0002831217738508.

Ladson-Billings, G. 2007. "Pushing past the Achievement Gap: An Essay on the Language of Deficit." *Journal of Negro Education* 76 (3):316–23. https://www.jstor.org/stable/40034574.

Leibowitz, B., and V. Bozalek. 2016. "The Scholarship of Teaching and Learning from a Social Justice Perspective." *Teaching in Higher Education* 21 (2):109–22. doi: 10.1080/13562517.2015.1115971.

Loughran, J. J. 2004. "A History and Context of Self-Study of Teaching and Teacher Education Practices." In *International Handbook of Self-Study of Teaching and Teacher Education Practices*, edited by J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, and T. Russell, 7–39. Dordrecht: Springer.

Milner, H. 2010. *Start Where You Are, but Don't Stay There: Understanding Diversity, Opportunity Gaps, and Teaching in Today's Classrooms.* Cambridge, MA: Harvard Education Press.

Owen, P. 2010. "Increasing Preservice Teachers' Support of Multicultural Education." *Multicultural Perspectives* 12 (1):18–25. doi: 10.1080/15210961003641310.

Sensoy, O., and R. DiAngelo. 2017. *Is Everyone Really Equal?: An Introduction to Key Concepts in Social Justice Education.* 2nd ed. New York: Teachers College Press.

Shulman, L. S. 1987. "Knowledge and Teaching: Foundations of the New Reform." *Harvard Educational Review* 57 (1): 1–22. doi: 10.17763/haer.57.1.j463w79r56455411.

Valencia, R. 1997. *The Evolution of Deficit Thinking.* London: The Falmer Press.

Valencia, R. 2010. *Dismantling Contemporary Deficit Thinking: Educational Thought and Practice.* New York, NY: Routledge.

Villegas, A. M., and T. Lucas. 2002. *Educating Culturally Responsive Teachers.* Albany, NY: SUNY Press. doi: 10.1177/0022487102053001003.

Weiner, L. 2006. "Challenging Deficit Thinking." *Educational Leadership* 64 (1):42–5.

Welner, K. G., and P. L. Carter. 2013. "Achievement Gaps Arise from Opportunity Gaps." In *Closing the Opportunity Gap: What America Must Do to Give Every Child an Even Chance*, edited by P. Carter and K. Welner, 1–10. New York, NY: Oxford University Press.

Zygmunt, E., and P. Clark. 2016. *Transforming Teacher Education for Social Justice.* New York: Teachers College Press.