




Responding to Uncertainty: Teacher Educator Professional Development Through Co-Teaching and Collaborative Reflection

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ABSTRACT

This exploratory paper describes the collaborative planning, reflection, and teaching for two teacher educators in the process of professional development and acclimation to new faculty positions in a College of Education. As a result of intense and reflective conversations, they discovered a mutual interest in the writings of Schön (1987) and found that his work on uncertainty, uniqueness, and value conflict served as a useful heuristic for understanding their shared experience of co-teaching a curriculum course. Their experiences of reflection in and on action, and their subsequent commitment to changes in their practice as teacher educators, are told in a narrative format to help other college educators see the personal as well as professional growth and development that occurred for both.

 Large class sizes are becoming more common at many universities and teacher education courses are proving no exception. The tensions between modelling best practices and managing a large number of students have become a very real challenge as teacher educators confront this issue in a myriad of ways at all levels. This may be perhaps more frequent among undergraduate teacher preparation courses. As two developing teacher educators, we wished to reflect upon and weave together our individual stories of collaboration in teaching, planning, and changing a course assigned to us as new instructors of a college curriculum course. This reflective narrative presents our unique experiences in which our pedagogical values conflicted significantly with the reality of a teaching assignment where

uncertainty was greatly present. We began our positions as new teacher education faculty at a public, regional university in a rural part of the south. Faced with class sizes exceeding 40 students in classrooms meant for 30, we took a risk by trying something neither of us had done before—combining our classes and co-teaching the course to nearly 90 elementary education students. We found ourselves in a place where “uncertainty, uniqueness and value conflict” (Schön, 1987, p. 6) permeated nearly each day of the semester as a result of several factors that challenged our confidence as teacher educators. It also, however, made teaching this particular course an opportunity for us to improve our own teaching practice. While the experience caused both distress and discomfort, it ultimately led us through an iterative process of collaborative reflection, which informed our active and significant professional growth as faculty. We were and are deeply committed to supporting our students’ professional preparation while also enriching our own. In this descriptive study, we reflect on our arc of professional growth and the specific factors and processes that helped us respond to the challenges presented using collaborative reflection as the lens through which we saw each of these factors.

Teacher Educator Professional Growth

We draw upon the literature in teacher educator development and reflective practices to provide a context for our inquiry. Teacher educator growth and development emerges as educators actively seek ways to grow as professionals in their practice, both individually and as members of a professional community. This occurs in collaborative research (and reflection on that research), co-teaching, and individual and collaborative reflective practices. This development is often framed as a journey. This metaphor “reflects some of the joys and hardships that travelers [teacher educators] experience during their efforts to climb mountains, to cross borders and to explore new territory” (Swennen & Bates, 2010, p. 2) in order to grow and develop professionally.

Most teacher educators at institutions of higher education collaborate on research. Griffiths and Poursanidou (2005) detail their process of collaborative research in their efforts to teach social justice concepts to beginning teachers. They suggest that collaboration is a “complex set of processes” (p. 154) including: context, relationships, and institutional factors such as support at all levels including the department and program. Webb and Scoular (2011) reflect on their collaborative action research project and the ways they came to frame their work through discussion about the literature in action research and reflection. Co-teaching, though often mostly researched

at the K-12 level, is an emerging source of professional growth and development at the post-secondary level. At this level co-teaching manifests itself in a few different ways. There is the collaborative process of teaching the same course simultaneously, yet working together on content, integrating differing content areas into one course, teaching separate yet complementary content courses and teaching the same course and content together. Hug and Moller's (2005) research focuses on their collaborative work across two courses with shared assignments making connections between science and literacy. They detail the ongoing conversations as well as the personal and professional impact of learning together that lead to deeper understanding of teaching in an integrated manner. Similarly, Enfield and Stasz (2011) deliberately created an integrated course teaching math, science, social studies, and language arts methods with a common syllabus and common readings. The classes met separately and together at different times during the semester. In their study, Enfield and Stasz (2011) argue that co-teaching requires a creation of shared norms and common understandings. Ferguson and Wilson (2011) co-taught a reading methods course to 30 students in order to model co-teaching methods that the pre-service teachers were most likely to find in K-12 classrooms. The authors initially were stymied by issues of power and responsibility, but were able to develop and grow professionally and personally through the experience.

Reflective Practice

Reflective practices also offer a source of growth and development for educators. To improve one's practices as a teacher educator, reflection in and on action is a useful method of providing professional development for teacher educators. Minott (2010) describes his experience in "grappling with the daily challenges of teaching" (p. 325) and how reflection builds practical knowledge to improve teaching practices. Reflection on being a part of a community of practice and the growth that occurs within individuals and across the group has emerged in the literature. Gallagher et al. (2011) share their growth as new teacher educators through the establishment of a self-study research group. Barak, Gidron, and Turniansky (2010) analyzed their stories about becoming educators in an intensive program in order to understand the interconnectedness between the growth of the individual and the group.

While many theorists offer ideas on reflection and reflective practice, Donald Schön's (1987) work resonated with us because he addresses the problem for professionals of having to navigate what he terms "the zone of indeterminate practice" (p. 6) by challenging the traditional model of professional knowledge, and further to seek

“making sense of uncertainty, performing artistically, setting problems, and choosing among competing professional paradigms” (p. 20). For Schön an *uncertain* situation is problematic in several ways in that it lacks a technical solution and exceeds the bounds of professional understanding. A *unique* case is one that “falls outside of the categories of existing theory and technique” (p. 5) and therefore cannot be solved by simply applying some previous understanding, rule, or technical solution. The standard models present in professional knowledge would not suffice. Another key component of the indeterminate zone of practice is *value conflict*. In many situations there is a competition among values. In public schools, for example, there are current debates on the overreliance on educational technologies; this debate reflects competing priorities regarding funding, focus, and curricular decisions such as the choice to use student- or teacher-centered instructional strategies (Cuban, 2009). Uniqueness, uncertainty, and value conflict were important catalysts for our growth through co-teaching and co-planning, as well as collaborative reflection. We acknowledge that Schön is not without his detractors including those that offer alternative views on reflective practice (Connelly & Clandinin, 1988; Eraut, 1995; Zeichner & Liston, 2013). However, we feel that his work served as a useful heuristic for us as we sought to understand our shared teaching experience described in this paper and the issues of uncertainty, uniqueness, and value conflict that arose.

Gallagher et al. (2011) write, “Teacher education is complex work involving curriculum, pedagogy and research, yet most teacher educators are provided with little professional development support or mentoring” (p. 880). Often growth and development is secondary to competing priorities of research responsibilities, service requirements, and other teaching and workload issues. Despite these challenges, many teacher educators are still committed to professional growth through multiple experiences such as formal or informal co-teaching and other collaborative work with colleagues related to their research and/or instruction with teacher candidates.

While the research and theory on collaborative reflection for teacher educators is emerging, the related body of literature on co-teaching, collaborative research and reflection, outlined above, informs our work and is one in which we hope to contribute our unique experience. In using collaborative reflection to decide on co-teaching a large class of preservice teachers (89 students), our experience was less deliberate than for Enfield and Stasz (2011) and Ferguson and Wilson (2011), and was more of a collaborative response to supporting each other and providing our students with both our knowledge and expertise. This study is methodologically similar to Griffiths and Poursanidou’s (2005) co-teaching experience in which we present, as they did, a highly reflective narrative of our experience.

Our Collaborative Reflection and Personal Growth as an Iterative Process

In this next section, we detail information about the factors and the process that led us to the idea of co-teaching and co-reflection as a means to address our own indeterminate zone of practice and then describe the impact of that subsequent co-teaching and co-planning experience on the students and our own development as teacher educators. Throughout this process, collaborative reflection as an active and fluid support for professional growth constantly informed all aspects of our practice.

Context, Relationships, and Institutional Factors: Telling Our Stories as Carrie and Nancy

Recently we, Carrie and Nancy, joined the teacher education faculty at a public, comprehensive university located in a rural mountain region in the southeastern United States. We now convey our story as two teacher educators who were each assigned a section of a curriculum class. We spent time over the summer meeting and preparing for the course. That year the average class size for the University was 19 and the student-faculty ratio in education programs was 13-to-1; over 82% of classes at the University reported an enrollment of 30 or less. Upon our arrival at the institution, Carrie's course had 53 students enrolled while Nancy's had 36 students. Although the numbers were a concern, we felt confident in the syllabus and activities we co-designed for the course that met once a week for 160 minutes.

One week before the semester, the course was changed by the department from two to three credits and the content expanded from an emphasis on K-2, primary curriculum to include the 3-6, upper grades, continuum. This sudden change in the course structure forced us to rapidly modify the course design to accommodate the expanded content. Carrie had taught a similar course as a graduate instructor and was able to offer relevant resources to address the content needs. During the first week of classes we met with our sections individually and attempted to implement our co-designed activities. Carrie was unable to fully complete many of the initial activities because it took so long to organize and hear from 53 students. Nancy's first class experience was similar. With nearly 40 students in a small room she had to find extra chairs so that students could squeeze around the tables in a room that was uncomfortably warm even with the windows open, which resulted in distracting street noise.

After the first class our confidence was shaken. Immediately after the class we met, since the sections met at the same time, and the frustration was palpable. Schön (1987) writes that it is usually a surprise that jolts us out of our routine response to our professional responsibilities. Carrie was overwhelmed by the sheer numbers in her class and wondered how she was going to implement best practices for teacher education with so many students. Nancy was also concerned that the physical space would prevent good instruction from occurring as group work or any movement within the classroom was difficult. She also felt uncertainty with the course content added just before the course began as she did not have prior experience with teaching upper grades curriculum. As collaborators, we sat down to discuss what happened and explore our feelings; we quickly realized we had no precedent knowledge from which to draw for the current predicament. This context was unique to our experiences and the departmental/institutional support shifted us to a place of great uncertainty.

In those moments following the first class, the uncertainty and value conflict in the zone of indeterminate practice was already present and we shared our concerns over cramped and uncomfortable classrooms that threatened the possibility for forming relationships with the students and creating a sense of community. We struggled also with the desire to make the class engaging and meaningful, one of the core values we both held as teacher educators, while also making it manageable. We felt this to be an unknown journey, but were grateful to have each other as fellow travellers in this unfamiliar territory.

Following the first class session our “knowing-in-action,” the tacit knowledge of what leading teacher education classes like this curriculum course should be like, was challenged (Schön, 1987). In the days following the first class meeting, we drew support and strength from the opportunities to debrief with each other about the challenges we faced with separate sections of the course. We had already established a strong relationship by collaborating on the planning of the course and, as a result, had laid the foundation for the collaborative reflection in and on action that would follow.

Nancy and Carrie: Our Initial Response Supported by Collaborative Reflection

Schön describes reflection in action as the ability to “reshape what we are doing while we are doing it” (p. 26). We had a week until our second class meeting and immediately began to think of appropriate actions to take in response to our situation. The first ideas were of a technical nature. To address Carrie’s concern, we asked if we could even out the sections. We learned that of the rooms used by our department only one room (Carrie’s) could hold more than 40 students. So Nancy wouldn’t be able to take any of Carrie’s students into her already crowded space. We sat in Carrie’s office exploring possibilities that would help us address our concerns over the quality of the content delivery in both sections. In the midst of these conversations, it was clear to us that we had already relied on each other for creating and designing the content so perhaps we could rely on each other for delivering the content as well. Co-planning led us to the idea of co-teaching based on the strong collegial relationship we had already established. We decided to combine the sections and collaboratively teach this new section for the rest of the semester. Neither of us had co-taught a college course, but both of us realized that co-teaching was the best way to provide students access to both our expertise and for us to support each other. After gaining consent and support from the department head, we then asked the department office manager to find us a large classroom in another building to hold both sections. Our entry into co-teaching was a co-reflective response to uncertainty and in hopes of addressing the students’ needs. We were excited at the prospect of overcoming the contextual dilemmas by relying on our developing collaborative relationship and on the potential growth we might experience as teacher educators as a result of this new approach. This excitement may have prevented some of the power issues that occur in other co-teaching descriptions (Ferguson & Wilson, 2011).

We Begin Anew

The second week of the semester, we met as a whole group (89 students) in a lecture hall in the adjacent sciences building. We were very excited to be co-teaching as collaborators and shared with the students our thinking behind, and rationale for, this combined section. Modelling collaboration as well as reflection in action, we felt, was an added benefit for our students as well as a “two heads are better than one” approach which meant that we could draw from both of our skills, content knowledge,

and experiences in teaching the course. While the physical environment of a theatre arrangement presented some challenges to class activities, we adjusted our design of the course and developed what we felt was an effective use of our time by instituting content presentation via lecture-discussion during the first half followed by group-focused “stations” for the last half of class which gave students hands-on application of the material presented in the lecture-discussion. After co-presenting content through PowerPoint, video, and print material, followed by opportunities for students to ask questions and discuss as a whole group, we split the class into three smaller groups and had each rotate through stations that were facilitated by both of us and Lacey, our graduate assistant. Smaller group, station activities included: focused lesson planning practice, participating in a mock Morning Meeting, interacting with Montessori materials, and video analysis of classroom discipline. We met weekly both before and after each class session to plan the class events (e.g., lectures, station activities) and to collaboratively reflect on our impressions of how the class went and how the students were responding. While we could see there were some snags in the process, due to the class size and classroom space, we felt overall that this co-teaching model was working and that our collaborative efforts were a positive model for our teacher candidates.

Our Students Respond

At midterm, a formative assessment was conducted with the students by an outside faculty member to gather data on how the class was progressing and to elicit feedback from the students on their satisfaction with the course. Many co-teaching descriptions in the literature are deliberate and pre-planned, so we thought it best to seek feedback as we were still actively planning the course. Co-teaching experiences often result in benefits as well as drawbacks for instructors and students. Students sometimes experience confusion with who is their real instructor and disillusionment at differing grading practices or differing opinions of the instructors (Ferguson & Wilson, 2011). We avoided some of those issues by maintaining responsibility for grading our own original course enrollments. The results of the formative assessment were not just focused on the issue of having two instructors for the course, but on other issues such as content. The results did indicate that students felt that the class was too large, the room was not suitable for majors in an education course, much of the content was repetitive from prior courses and that, overall, the class was boring and lacked interaction. While not shocked by these results, we certainly were disappointed as we felt we were trying an innovative approach to this class that would address our own previous uncertainty.

By teaching as a team instead of as two colleagues in isolation, we hoped that the students would benefit from our combined knowledge and expertise.

We Respond in Turn

We next implemented new instruction we believed to be engaging for students in an effort to address their comments that the class was boring. In our crafting of the lectures we began to embed “turn and talk” opportunities in which students could reflect on a question posed in the lecture and talk with a peer about their thoughts. Some student clusters were occasionally willing to share with the whole group the results of their think-pair-share, although this was uncommon. The embedding of paired discussion seemed to help students feel less passive and to also encourage more connection with the class and with each other. A few students recognized our efforts to be responsive and more artful in our approach, and shared with us that they noticed that we tried to make the best out of the class. They also affirmed that the stations were working well, so we continued to use this model as the second half of the course proceeded.

Other comments from the formative student evaluations were less easy to address. As instructors, we often invited each other to comment during our lectures in a “tag team” approach which we thought would be lively and add fluidity to our instruction. We hoped this would resonate with students as we drew from both our bodies of experiences and expertise. While providing the initial lecture/discussion, we also might interject a comment or example when we felt it was appropriate. This practice was perceived by many students as “interrupting.” We never felt that it was interruption as we were very comfortable with each other based on the relationship we had built and deepened in our co-planning, co-teaching, and collaborative reflection. In co-reflecting on this particular student feedback, it was clear that our perception of what we were doing was very different from what the students perceived and that we had established shared norms of discourse with each other but not with the students (Enfield & Stasz, 2011). After our discussion and analysis of these specific formative evaluation data, we attempted to become more formal in our interactions with each other in front of the class.

The student data for this class also suggested that our teacher identities were evident to our students and that, perhaps based on their own backgrounds and experiences, they had a definite preference in the teaching styles of their instructors. Carrie was perceived as “aggressive” because her emphasis was on content and moving

the course forward with purpose and focus. As a mid-thirties Midwesterner, she did not use typical Southern discourse patterns with students (Johnstone, 2003) while Nancy, a native Southerner and older, was seen as more approachable and nurturing by students. Our personalities were among those things we could not change, but this element of the student feedback gave us a wealth of information upon which to reflect and, in many ways, was the motivation for connecting this experience to our inquiry on our own professional growth as teacher educators.

With these interventions we also sought solutions to our dissonance between our views of best practice and the realities of these external circumstances as expressed in the midterm assessment results. We were able to make modifications to our instruction that aligned with our values of active learning where possible and as described earlier. We tried to also make more personal connections with students, all 89 of them, so that we could monitor our efforts as reflected in their participation and interaction in the lecture-discussions and station activities. In our debriefing conversations we agreed to focus on the key concerns of the students over which we had control, namely those that related to content presentation and structure.

Collaborative Reflection Leads to Professional Growth: What We Learned

In this section we share the results of our professional growth as teacher educators. While Schön's characteristics of the indeterminate zone of practice—uncertainty, uniqueness, and value conflict—were evident in the situation in which we found ourselves, they were also evident in the unique personal histories and professional experiences we and our pre-service teachers brought to bear on this experience. As Lunenberg and Hamilton (2008) assert, both are interwoven and must be examined in tandem and within the context of each other.

For Nancy, building community is one of the most rewarding aspects of teaching. She feels that so much is achieved both in teaching courses and in mentoring students by creating meaningful connections and caring relationships with students. Noddings (1984) describes these reciprocal relationships between the “cared by” and “cared for” and emphasizes the need for both students and teachers to be active and aware participants within these caring relationships. In grappling with the class size and the unrealistic expectation that connected relationships could be possible with 89 students, Nancy affirmed a commitment to this value and sought to strengthen this in

her other classes at that time and since. For Carrie, getting students to think critically about teaching and learning in the public schools is paramount. Carrie came to realize, however, that directly challenging students to think critically has its limitations at the undergraduate level. As with working with younger students, mutual respect is key to engaging in deep learning. While not fundamentally changing her identity, Carrie became more intentional in cultivating non-academic interactions with students in this and subsequent courses to encourage mutual understanding and respect.

Carrie also felt confident in knowing the content needed for the course, but lacked confidence in her unfamiliar role as full-time faculty member in this new geographic location. With some prior experience as a teacher educator, Nancy felt the tension between generally knowing what to do but feeling uncertainty about a new institution and a unique course. While Carrie's uncertainties stemmed from the newness of the position, Nancy's stemmed from her prior experience with teaching graduate level courses in instructional technology and not undergraduate curriculum to pre-service teacher candidates. We also shared sources of uncertainty as both of us grappled with the imposter phenomenon (Clance & Imes, 1978) in our novice roles as elementary teacher educators. Co-planning and co-teaching served two essential purposes: it allowed us to rely on each other's strengths in delivering the course and provided intellectual and emotional support as we discovered and subsequently embraced the practice of collaborative reflection. Similar to Hug and Moller's (2005) study that emphasized ongoing conversations, we feel the most important outcome of our co-planning, co-teaching, and co-reflecting was the deep and meaningful manner in which it sustained our professional growth while establishing a collegial relationship with a fellow faculty member.

Our situation presented value conflicts for us to demonstrate and engage in effective practices in teacher education. What we found in our reflective conversations were the aspects of our practice which we could not compromise and that we would seek to implement, to the best of our abilities, despite external barriers and limited affordances. These core values were more clearly articulated and subsequently fomented as a result of the conflict we experienced in our unique and uncertain teaching situation. We found that we value: active interaction between students and with instructors; hands-on exploration of course content; building community through connected relationships; and reflective collaboration between colleagues including us, the two instructors. We were in a constant state of reflecting in and on action, or what we came to call collaborative reflection, during the semester. Toward the end of the semester we saw how, as a result of this process, we could critically evaluate our actions using Schön's ideas as a heuristic to make meaning of our experience and learning.

We found that despite our struggles, or perhaps because of them, as teacher educators this experience contributed greatly to our professional growth and development. For us, our framing of the situation concerned the need to support each other in our first semester in new positions as teacher educators. At the heart of this process was our interest in going beyond survival and a standard-technical solution towards ensuring we met the needs of our students given the distinct characteristics of the situation. We also realized the importance of remaining true to our values as teacher educators by providing engaging, meaningful instruction. And, we hoped to learn how to be more effective teacher educators in this course as well as those we would teach in the future. Our experiences, while not exactly like Enfield and Stasz's (2011) deliberate attempt at co-teaching, led to similar conclusions:

Engaging in practices as we describe here require a willingness to take risks, to be fearless, and to make oneself vulnerable. Such actions are intuitively counter to stereotypical roles as professor. Thus we recognize that our willingness to engage in this project was serendipitous in that we were both willing to take risks, be vulnerable, and expose our faults to one another. In short, we were willing to take a stance that co-teaching would be effective for our students given the course and context. (p. 14)

Epilogue

To teach pre-service teachers effectively, many best practices must be modelled: relationship building, differentiation, and group work. We were experiencing the "contradictions between the content and process of teacher education" (Loughran & Russell, 2002, p. 3). The content we wanted to teach was not well matched to the time and space or to the large numbers in our section and the learning space itself inhibited modelling best practices. The formative assessment data provided by the students, although painful at times, indicated that their concerns were similar to ours and we were determined to be responsive in our instruction. We agreed to focus on the aspects of the course which we could change. As for the other issues beyond our control, such as the classroom in which we would have to remain, we simply acknowledged these openly and again told our students explicitly why we thought this combined and co-taught course was of benefit. Underlying this message to our students was a systemic uncertainty. We felt uncertain because we were new to the institution, the students, and the course. As we moved into problem solving, started to unpack issues to resolve, and identified possible action, the uncertainty increased.

As a result, we redoubled our efforts at addressing each uncertainty collaboratively and reflectively.

While much has been made of reflection in action, there is great worth in continuing to reflect *on* action and to use that reflection to change practice. As Minott's work (2010) suggests, reflection on teaching can lead to practical knowledge, and for us, it was also collaborative. Our teaching practice has changed as a result of this experience as we spend more time getting to know our students and their prior knowledge. We also make our teaching strategies and intentions more explicit to the teacher candidates we teach so that we model approaches such as collaboration and co-teaching in ways that are clearly representative of our values as teacher educators. As colleagues we continue to have active dialogue and to support each other in growing as professionals.

As colleagues, we are also intentional about making time to converse about the complexity of our practice as teacher educators and to address other circumstances that relate to uncertainty, uniqueness, and value conflicts while seeking solutions through collaborative reflection. As we encounter issues in our individual practice, we feel free to explore and implement solutions, be they familiar and technical or unfamiliar and innovative. The framework taught us then, and reminds us today, that there are multiple ways to respond to uncertain and unique issues of practice in the teacher education classroom.

Both teacher educators as well as the teacher candidates that they teach may apply technical solutions to unique problems, which is logical given the challenges of teaching in both contexts. However, engaging in a process of reflection on *and* in action as suggested by Schön—we contend collaboratively—can serve a twofold purpose. First, more effective practical solutions are created and implemented in a unique situation, and second, educators develop a process by which in future situations of indeterminate practice, frustration is avoided and solutions are approached reflectively and artfully. Additionally, educators can gain deeper understandings of their professional practice and support their own professional and identity development.

References

- Barak, J., Gidron, A., & Turniansky, B. (2010). 'Without stones there is no arch': A study of professional development of teacher educators as a team. *Professional Development in Education*, 36(1-2), 275–287.
- Clance, P., & Imes, S. (1978). The impostor phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research and Practice*, 15(3), 241–247.
- Connelly, M., & Clandinin, J. (1988). *Teachers as curriculum planners: Narratives of experience*. New York: Teachers College Press.
- Cuban, L. (2009). *Hugging the middle. How teachers teach in an era of testing and accountability*. New York: Teachers College Press.
- Enfield, M., & Stasz, B. (2011). Presence without being present: Reflection and action in a community of practice. *Journal of the Scholarship of Teaching and Learning*, 11(1), 108–118.
- Eraut, M. (1995). Schön Shock: a case for refraining reflection-in-action? *Teachers and Teaching: Theory and Practice*, 1(1), 9–22.
- Ferguson, J., & Wilson, J. (2011). The co-teaching professorship power and expertise in the co-taught higher education classroom. *Scholar-Practitioner Quarterly*, 5(1), 52–68
- Gallagher, T., Griffin, S., Ciuffetelli Parker, D., Kitchen, J., & Figg, C. (2011). Establishing and sustaining teacher educator professional development in a self-study community of practice: Pre-tenure teacher educators developing professionally. *Teaching and Teacher Education*, 27, 880–890.
- Griffiths, M., & Poursanidou, D. (2005). A self-study of factors affecting the success in two collaborations on the teaching of social justice. *Studying Teacher Education*, 1(2), 141–158.
- Hug, B., & Moller, K. (2005). Collaboration and connectedness in two teacher educators' share self-study. *Studying Teacher Education*, 1(2), 123–140.
- Johnstone, B. (2003). *Features and uses of the Southern Style in English in the southern United States* (pp. 189–207). Stephen J. Nagle and Sara L. Sanders (Eds.).
- Loughran, J., & Russell, T. (2002). *Improving teacher education practices through self-study*. London: Routledge-Falmer.
- Lunenberg, M., & Hamilton (2008). Threading a golden chain: An attempt to find our identities as teacher educators. *Teacher Education Quarterly*, 35(1), 185–205.
- Minott, M. (2010). Reflective teaching as self-directed professional development: Building practical or work-related knowledge. *Professional Development in Education*, 36(1-2), 325–338.
- Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. Berkeley: University of California Press.
- Schön, D. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.
- Swennen, A., & Bates, T. (2010). The professional development of teacher educators. *Professional Development in Education*, 36(1-2), 1–7.
- Webb, L., & Scoular, T. (2011). Reflection on reflection on reflection: Collaboration in action research. *Educational Action Research*, 19(4), 469–487.
- Zeichner, K., & Liston, D. (2013). *Reflective teaching: An introduction*. Routledge.



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