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Landscape of Reflection in Teacher Education

Teaching is more than the cognitive application of learned technical knowledge and skills (Fairbanks et al., 2009). It is a complex, evolving, and demanding practice. Inherently social, effective teaching requires deep engagement with not just one's students but also one's internal world of thoughts and emotions. Therefore, maintaining reflective teaching as an anchoring practice and core principle within teacher education programs is critical. Yet, despite the ubiquity of "reflective teaching" nomenclature within teacher education, there exists no consensus definition (Hatton & Smith, 1995) nor a validated method for cultivating reflective capacity. Moreover, reflection is commonly taught as a technical, cognitive strategy for improving pedagogy with the goal of enhancing student achievement.

In this chapter, we reconstruct reflective practice to encompass "mindful reflection," or present-moment centered awareness characterized by openness and equanimity. Redefined in this way, we propose that reflective practice will allow teachers to better understand and regulate

their assumptions, motivations, affect, and cognitions, supporting teacher well-being and student achievement.

A Case for Reflection

Teaching is an emotional practice. Hargreaves (1998) argues, “Good teachers are not just well-oiled machines. They are emotional, passionate beings who connect with their students and fill their work and their classes with pleasure, creativity, challenge, and joy” (p. 835). The potential downside to the deeply emotional work of teaching is that when challenges arise, the optimism, hope, and positive aspirations may transform into stress and feelings of being overwhelmed, ultimately resulting in burnout. Indeed, stress levels are alarmingly high, especially among new teachers (APA “Teacher Stress Module,” 2013). In addition, attrition rates are close to 50% after five years of teaching (Ingersoll & Merrill, 2012).

It is increasingly clear that the quality of teacher–student relationships is critically important to student development and achievement. Teacher–student relationships that are characterized as warm and supportive predict school performance as well as social–emotional adjustment (Osher et al., 2008), even serving as a protective factor against the development of depression during adolescence (Wang, Brinkworth, & Eccles, 2013).

In contrast, detached or conflict–ridden student–teacher relationships, symptomatic of distressed and burnt out teachers, predict academic underachievement in the short–term and longitudinally (Spilt, Hughes, Wu, & Kwok, 2012) as well as student aggression (Howes, Hamilton, & Matheson, 1994). While a degree of mindful reflection may be intrinsic in some individuals, others do not inherently possess this capacity. Without intentional development of mindful reflection, these teachers’ ability to foster supportive relationships with students may be

compromised, enhancing stress and reducing well-being. Teacher education programs currently lack a systematic approach to develop this capacity.

One of the most common and difficult transitions that teachers make is moving from concerns about the self, such as a focus on self-adequacy, to concerns about the other (Feiman–Nemser, 2012). When preservice teachers actually confront the realities of teaching, there may be a tendency to seek basic survival skills at the expense of a deeper understanding of the complex interplay between teachers and students and teaching and learning (Kitchen, 2005). Indeed, during student teaching preservice teachers tend to mimic a cooperating teacher’s often more traditional style, picking up conservative practices and focusing more on how to control students rather than on student learning (Rozelle & Wilson, 2012).

Whereas preservice teachers may have been socialized to see teaching as simple, they are faced with complexity, competing demands, and dilemma–ridden situations (Fairbanks et al., 2009). Ball and Cohen’s (1999) notion that “teaching occurs in particulars—particular students interacting with particular teachers over particular ideas in particular circumstances” (p. 10) highlights the impossibility of preparing preservice teachers for the infinitely variable situations they will encounter. No body of knowledge can prescribe the “right” practice for each moment, but cultivating mindful reflection will allow for adaptive responding.

In summary, teacher well-being and student achievement are intimately related through the quality of teacher–student relationships and the classroom learning environment. Mindful reflection, or the quality of reflective practice developed through mindfulness training, can support teacher well-being and pedagogy, allowing for in–the–moment reflection of the infinite “particulars.” By cultivating this capacity in preservice teachers, two problems in contemporary

education may be substantially addressed: teacher stress leading to teacher turnover, and suboptimal teacher–student relationships resulting in a degraded learning environment.

Defining Reflective Teaching

John Dewey’s (1933) conceptualization of reflection provides the foundation for most current uses of the term. Calderhead (1989) captures the essence of Dewey’s words in his description of reflection as a “purposeful, reasoned search for a solution” and “initiated by uncertainty and guided by one’s conception of a goal or end-point” (p. 44). This approach to fostering reflective capabilities in teachers seeks to develop strengths of observation, analysis, interpretation, and decision–making (Zeichner & Liston, 2013). Based on this idea of reflection, current models of teaching reflection are highly technical, relying on methods of problem solving and encouraging linear thought processes (Tremmel, 1993).

Recent changes in the public narrative of education have also influenced contemporary notions of reflective practice. As the landscape of K-12 education has marched towards greater emphasis on accountability by way of high–stakes testing, the role of reflection has further solidified around a technical, outcome–oriented conceptualization. In response to federal law (i.e., No Child Left Behind; Bush, 2001), student achievement became narrowly defined by standardized test scores. When achievement is defined by standardized knowledge, the pressure for classroom pedagogy to reorient towards scripted curricula, canonical knowledge dissemination, and formulaic, test–driven instruction grows (Au, 2007).

It is not uncommon now to approach reflection under the goal of data–informed decision–making. To be clear, data–informed decision–making is important for effective instruction. However, a myopic focus on “the data” (i.e., standardized assessment scores), loses

sight of critical thinking and inquiry on the part of students, and tends to push instruction toward replicable, scripted behaviors that leaves little room for mindful reflection.

Reflection On Action vs. Reflection In Action

Loughran's (1995) reflective framework delineates three types of reflection: anticipatory reflection, contemporaneous reflection, and retrospective reflection. Anticipatory reflection happens during the planning process as the practitioner thinks about what they anticipate happening in their lesson, contemporaneous reflection entails the "on the spot" decisions made while teaching, and retrospective reflection happens when thinking about the lesson afterward. Most teacher education programs approach cultivating reflective skills through processes of anticipatory and retrospective reflection.

Activities designed to encourage preservice teachers to think about their practice can include microteaching, free and journal writing, dialogic reflection, and action research (Hatton & Smith, 1995). Typical reflective questions asked by preservice teachers such as "How well did I teach?", "What assumptions have I made in teaching this way?", and "How else might I have taught the lesson?" are likewise retrospective in nature. Interestingly, even dialogue about "on the spot" or contemporaneous reflection usually occurs retrospectively (Freese, 1999).

While anticipatory and retrospective reflective processes are valuable to teacher development, contemporaneous reflection is paramount but least emphasized. Classroom climate and teacher-student relationship quality can be benefited or harmed by a momentary decision, and no level of anticipation or retrospective reflection can rewind these spur of the moment actions. In the absence of targeted training to develop such capacity, we question the degree to which anticipatory and retrospective reflection supports contemporaneous reflection or the

capacity for mindful reflection (see Calderhead, 1989). Indeed, substantial social science research demonstrates that it is precisely in times of high emotionality and stress that human beings are least capable of reflection and self-regulation (e.g., Muraven & Baumeister, 2000). Moreover, stress and high emotionality are ubiquitous in teaching.

Mindful reflection is a skill that affords teachers the presence of mind to become aware of and respond adaptively to their unfolding external and internal environments. For example, mindful reflection (i.e., contemporaneous reflection) may allow a teacher to notice the early somatic, cognitive, and emotional indicators of frustration and impatience. This noticing may be sufficient for a teacher to then regulate an impulsive, reactive behavior that could serve to damage student-teacher dynamics and the classroom climate as a whole. Similarly, reflective capacity might emerge as an awareness of the classroom environment. This moment-to-moment information may impact the quality of attention given to students and inform instruction so that pedagogy is tailored to the present, not just the anticipated, needs of students.

In summary, we have identified three main problems with current conceptualizations of reflective teaching. First, reflective practice has often been reduced to a cognitive, technical evaluation of pedagogy with the goal of improving a narrow, standardized notion of student achievement. Second, reflective practice has lost sight of the critical importance of the internal world of the teacher to classroom climate, pedagogy, and ultimately student achievement. As a consequence, preservice teachers receive little to no training in negotiating the stress, doubt, and strong emotions that attend to teaching (Jennings & Greenberg, 2009). Third, the scope of reflective practice must be broadened so that reflection can be applied in-the-moment. From this perspective, reflection is more than a linear thought process, but rather a suite of skills (e.g.,

present-centered awareness, equanimity) that allow teachers to skillfully respond to the particulars of teaching.

Cultivating Reflective Teaching Practice Through Mindfulness

Mindful reflection consists of a loose constellation of *interpersonal* and *intrapersonal* skills. Intrapersonal skills comprise those capacities that one calls upon when noticing and working with thoughts, emotions, and reactions. Interpersonal skills are capacities, often representative of intrapersonal skills, which emerge as one interacts with students, colleagues and others in the educational environment. The foundation of these skills is basic awareness.

The first step in building mindful reflection is to become more sensitive and attuned to one's internal (e.g., thoughts, emotions, sensations) and external (e.g., classroom environment, students) experience, which are seamlessly interconnected (Byrnes, 2012). For instance, to respond to the needs of students, a teacher must first be aware of the need. This may include awareness of aspects of the individual student (e.g., emotional state), awareness of classroom and interpersonal dynamics, and awareness of the student's prior knowledge or schema. Similarly, in order to effectively manage stress and frustration, a teacher must first be aware that such feelings are present.

However, simply becoming aware of a student need or one's own stress is not sufficient. Indeed, awareness of the former without the flexibility to alter instruction in some way to benefit the student will not satisfy the need. In the latter case, awareness of stress, anxiety, or other negative emotionality may only serve to reinforce it, especially when these feelings are accompanied by perseverative thinking or self-doubt (e.g., Nolen-Hoeksema, 2000). In fact,

experiencing strong negative emotions while lacking the capacity to effectively regulate them is descriptive of the syndrome of burnout (Maslach, Schaufeli, & Leiter, 2001).

Mindfulness is ubiquitously characterized as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience...” (Kabat-Zinn, 2003, p.145). Awareness is central to mindfulness. In particular, mindfulness training is intended to cultivate awareness imbued with equanimity. Equanimity is the capacity to be with experience as it arises, without reactively being swayed by the content of experience. For example, a teacher who has cultivated equanimity may experience tension in the body as frustration arises, but that embodied frustration is allowed to be fully experienced.

In contrast, resistance enhances frustration. In addition to the unpleasant feeling, resistance adds a layer of not wanting what is present. The more the feeling persists, the greater the resistance, the more negative the experience becomes. It is during resistance that a teacher is most likely to become so overwhelmed that she lashes out at students in anger.

Equanimity provides a “workspace” in which response rather than reaction to experience can occur (e.g., Vago & Silbersweig, 2012). This workspace is a necessary ingredient for mindful reflection. It allows teachers to flexibly adapt instructional or management behaviors so that they meet the needs of the student(s) in front of them. Although mindfulness in education research is in its infancy, there exists preliminary support for this contention (e.g., Flook, Goldberg, Pinger, Bonus, & Davidson, 2013; Roeser et al., 2013).

Techniques for building this workspace are lacking in current teacher education programs. Mindfulness is a method well suited to building the foundation of mindful reflection. For example, body-scan practice, a core mindfulness training, trains the mind to be aware and

accepting of the whole spectrum of bodily sensations. As in our example of equanimity above, body-scan practice can provide an alternative approach to working with difficult (and positive) emotions so that one experiences but is not driven by them. It is not surprising then that among the most robust effects of mindfulness training are reductions in negative affect (e.g., Goyal et al., 2014).

Stress and feeling overwhelmed are common experiences for preservice and new teachers (APA “Teacher Stress Module,” 2013). These states tend to narrow awareness to perception of only one’s negative experience (Ayduk & Kross, 2010), limiting the capacity to perceive others fully and reducing well-being (Lo, Ho, & Hollon, 2010) thereby threatening key constituents of effective teaching (e.g., student-teacher relationship quality). Cultivating mindfulness in preservice teachers has the potential to support a host of salutary skills: effective regulation of emotion, resilience to stress, enhanced awareness of others, and increased kindness (Condon, Desbordes, Miller, & DeSteno, 2013).

Enhanced awareness coupled with equanimity towards experience provides new opportunities to notice the needs of others. This enhanced noticing opens the door to higher quality relationships with students as well as matching instruction to student needs. A major benefit of developing these skills during preservice teacher education is that mindful reflection can become a primary disposition, providing a foundation of resiliency before it is called upon.

Mindfulness may be a powerful support for enhancing preservice teacher education, but it is not a panacea. Although little empirical work has been conducted on individual differences in response to mindfulness training, it is clear that mindfulness training does not produce uniform results. Some individuals benefit more and others less. The factors contributing to these

differences remain to be explicated, but motivation, time dedicated to mindfulness practice, and the quality of the curriculum and instructors are likely contributors (Davidson & Kaszniak, 2015). Integrating mindfulness or other contemplative practices (e.g., compassion) into preservice teacher education will likely require several iterations before the curriculum is optimized. Our experience has been that explicitly integrating teaching-related experiences into the mindfulness training enhances engagement and interest in the training,

Another area of concern is the ever-broadening scope of activities described as mindfulness. We use the term to reflect contemplative techniques derived from long-standing contemplative traditions. Mindfulness-Based Stress Reduction (Kabat-Zinn, 1982) is currently paradigmatic, but other programs exist meeting this criterion. Relatedly, we are wary of curricula offering a quick fix. Mindfulness and other contemplative training regimens are traditionally thought to produce benefits over time (Davidson & Kaszniak, 2015). Although research on mindfulness has not come to a consensus on optimal duration and intensity of training, in general, more practice seems to predict stronger results. Because preservice teacher education typically occurs over several semesters, integrating mindfulness training into it has the potential benefit of offering extended exposure to mindfulness.

In the novel well-being training our group has developed and is currently researching with preservice teachers, mindfulness is one of several qualities the program is intended to foster (Hirshberg, et al., unpublished). First, practices intended to cultivate attention, equanimity, and meta-awareness are introduced (Dahl, Lutz & Davidson, 2015). Clarifying and then strengthening the intention and motivation to teach are important elements of the training. Also infused are kindness and compassion, practices that can direct the attention cultivated through

mindfulness in prosocial ways. The hope is that a preservice teacher experiences reactivity but instead engages mindful reflection, which could include remembering (a classical definition of mindfulness) the motivation that drove them to teach, thereby opening a work space in which emerges a response based on caring motivation instead of reactive frustration.

The training is designed to explicitly engage preservice teachers' teaching experiences. Several strategies are used to achieve this, including asking preservice teachers to reflect on a successful or challenging teaching experience as the basis for exploration during a mindfulness practice. Preservice teachers may be "assigned" an informal practice of simply taking a brief moment before entering the classroom to recall and deeply feel the caring motivation that led them to teaching.

Qualitative reports from preservice teachers suggest they are putting mindful reflection into practice. One participant described the challenges she faces working with students with behavioral difficulties. In her school, the language "red zone" is used to describe behavior that has elevated to the point of being highly disruptive. Prior to engaging a student who often enters the red zone, this preservice teacher spontaneously recalled an informal check-in practice where one very quickly scans sensations in the body as well as the quality of mind. She did this practice immediately before engaging this student and discovered that she was nearly entering the red zone herself in anticipation of what might happen. She went on to explain how this awareness helped her maintain more balance, so that she was receptive to the student instead of reacting to him based on her own anticipation of how the interaction would unfold.

Conclusions

In conclusion, scholarship on teacher education has long emphasized the importance of reflection in teaching. What has been largely absent, however, are effective strategies for developing the mode of reflection that will have the greatest impact on preservice and professional teachers: mindful reflection. Cultivating mindfulness, through carefully curated contemplative curricula, can help solve the gap between knowing and actualizing by furnishing preservice teachers with the inter- and intrapersonal skills required for contemporaneous or mindful reflection. As mindfulness and other contemplative techniques gain traction in teacher education and elsewhere, it is critical that careful consideration be given to the skills that enable teachers and students to flourish, and the practice or practices best suited to the cultivation of those skills.

Essential Ideas

- The inner life of the teacher deserves recognition and support.
- The approach to fostering reflective capacities within teacher education programs is currently limited.
- Mindful reflection can support teacher well-being and pedagogy. It is a skill that can be learned through practice.
- Mindful reflection is present-moment centered awareness characterized by openness and equanimity.
- Many of the qualities of effective teachers can be developed through mindfulness training.

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