The Divergence and Convergence of Critical Reflection and Critical Reflexivity: Implications for Health Professions Education

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Abstract

As a field, health professions education (HPE) has begun to answer calls to draw on social sciences and humanities (SS&H) knowledge and approaches for curricular content, design, and pedagogy. Two commonly used SS&H concepts in HPE are critical reflection and critical reflexivity. But these are often conflated, misunderstood, and misapplied. Improved clarity of these concepts may positively affect both the education and practice of health professionals. Thus, the authors seek to clarify the origins of each, identify the similarities and differences between them, and delineate the types of teaching and assessment methods that fit with critical reflection and/or critical reflexivity. Common to both concepts is an ultimate goal of social improvement. Key differences include the material emphasis of critical reflection and the discursive emphasis of critical reflexivity. These similarities and differences result in some different and some similar teaching and assessment approaches, which are highlighted through examples. The authors stress that all scientific and social scientific concepts and methods imported into HPE must be subject to continued scrutiny both from within their originating disciplines and in HPE. This continued questioning is core to the ongoing development of the HPE field and also to health professionals' thinking and practice.

Health professions education (HPE) has begun to answer calls to draw on the social sciences and humanities (SS&H) for curricular content, design, and pedagogy.[1–8] Health professionals must—as evidenced by competency frameworks—perform social and humanistic roles and activities[9,10]; thus, SS&H offers clear benefits to HPE. However, applying SS&H methods in HPE in an informed manner can prove challenging.[11] On the one hand, SS&H approaches often require thoughtful adaptation if they are to be meaningful and effective in HPE.[11,12] On the other hand, many examples abound of well-intentioned yet ill-informed attempts at applying SS&H content and methods to health professions training programs.[13–16] As incorporation of SS&H rises in prominence in HPE,[17] and as the popularity of SS&H-related goals, roles, and activities such as patient-centered care, health advocacy, and portfolio courses surges, misapplication risks becoming even more widespread. Misapplication may result in dismissal of potentially useful concepts and in poorer educational outcomes than could be realized with more informed applications.

Two commonly misunderstood and misapplied SS&H approaches in HPE are critical reflection[14,18,19] and critical reflexivity.[20–23] Arising from overlapping yet different intellectual traditions, these concepts share similarities but have distinct meanings, uses, and implications for pedagogy and assessment. However, we have noticed that, perhaps because they have some foundational ideas in common, or perhaps because they sound similar, they are often confused and/or conflated with each other. This confusion should concern educators because a solid foundation in the underlying knowledge and methods is required to realize the potential of SS&H knowledge and approaches in HPE.

Scholars have noted negative consequences from clumsy applications of reflection and reflexivity in medical education, including the use of reflection as surveillance,[24,25] and we have noticed its overuse to the point of driving "reflection fatigue." These consequences are serious at a time of increased accountability and complexity alongside decreased funding and resources. We cannot spend or waste time and resources on poor or ineffective implementations of education approaches. Yet we should not "throw the baby out with the bathwater"; that is, the failings of implementations of reflective approaches should not be mistaken for the failings of reflection and reflexivity. We argue that understanding the details of both critical reflection and reflexivity can support their more nuanced and thus effective study and application.

In this article, we begin to articulate a solid base for both critical reflection and critical reflexivity for the HPE field. We start with defining each in turn (see Table 1 for a summary of their definitions). We locate each in their intellectual contexts to help readers make sense of their orientations and goals, and we clarify the similarities and differences between them. We then delineate the types of teaching and assessment methods that fit with critical reflection versus critical reflexivity. Because of space constraints, we do *not* explore in depth the concepts embedded in the descriptor "critical" (see Box 1 for a brief definition of this and other terms used in this article); put simply, as a qualifier before reflection or reflexivity, "critical" means that the associated reflective or reflexive activities specifically challenge/question assumptions, power relations, and structural or systemic effects and constraints on practice.[26–28]

Critical Reflection

Critical reflection can be defined as a process of examining assumptions

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Table 1
Comparing Critical Reflection and Critical Reflexivity

Concept	Critical reflection	Critical reflexivity
Definition	A process of examining assumptions (i.e., individual and societal beliefs and values), power relations, and how these assumptions and relations shape practice.	A process of recognizing one's own position in the world in order both to better understand the limitations of one's own knowing and to better appreciate the social realities of others.
Object of reflective/ reflexive activity	One's own assumptions and material manifestations of societal assumptions.	The discursive world, societal norms and structures, and power relations.
Goal of reflective/ reflexive activity	Praxis (theory-informed practice)[29]	Agency (influencing societal structure, norms and values)[45]
Origins	Aristotle	Foucault
	Habermas	Bourdieu
	Freire	Nietzsche
Contemporary authors	Stephen Brookfield	Patricia Hill-Collins
	Stephen Kemmis	Sherene Razack
	Jack Mezirow	Donna Haraway
	Maxine Greene	bell hooks
	Joseph Raelin	Edward Said
Health professions education authors	Jan Fook	Brenda Beagan
	Elizabeth Anne Kinsella	Saleem Razack
	Arno Kumagai	Carolyn Taylor
What we don't mean	Written self-reflection. We are not referring to written self-reflections as often used in student portfolio entries.[14,68]	Reflexivity in qualitative research.[69] We are not talking about reflexive processes in the context of qualitative research.
Implications	Informed everyday practice, including material workarounds (e.g., eschewing a protocol if it does not best serve a patient[70]), contributing to a better world over time.	Long term systems change including re-defining "norms" (e.g., re-defining "excellence" in order to re-frame our approach to student selection[71]), contributing to better everyday practices over time.

(i.e., individual and societal beliefs and values) and power relations, and how these assumptions and relations shape practice. When assumptions lead to harmful practices, the critically reflective practitioner aims to challenge and change assumptions and practices. The goal of critical reflection is thus praxis: a balanced fusion of critical theory and practice that leads to social improvement.[29]

Critical reflection orients practitioners to question and act on the material (see Box 1) effects of harmful assumptions. For example, a family doctor may notice harmful effects built into some of the material objects used in practice, such as the paperwork she completes for persons with disabilities to access supports and resources.[30] To garner access to certain supports for her patients, she is often required to "rate" their level of disability. The process of rating disability is usually overly simplistic and prone to misrepresenting the person[31] and can be damaging to the self-image of patients and to her relationship with them if left undiscussed.[31] Because she recognizes this potential harm—through critical reflection—the family doctor ensures that in the relationship she builds with her patients, they appreciate the necessity and limitations of the rating she has to conduct. By engaging in action informed by critical reflection, this family doctor is demonstrating praxis. She may also work to improve the policies and protocols shaping practice, over time. She may have learned to practice this way through formal education and/or learning in and through practice and personal experience.

In education, reflection is commonly defined as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends."[32(p6)] Habermas,[33] often credited with adding a critical dimension to reflection, added to this definition that knowledge remains constrained by the social conditions in which it was created, unless a critical lens is applied to the reflective process. In the example above, if the family doctor was reflective while working on the disability paperwork, she may indeed have questioned her own assumptions about the patient's wishes, to ensure that she was practicing in a person-centered and thoughtful manner. However, she may not have recognized or tried to mitigate the potential, more insidious harms of the paperwork process, which were brought to light through *critical* reflection. She would also be less aware of the position she holds by virtue of being the signatory on this paperwork, which ultimately grants/denies the patient's access to resources, and her position relative to the larger institutional complex. Critical reflection can thus produce emancipatory knowledge, as it aims to transform rather than perpetuate existing perspectives and power relations (in this case, by transforming the perspective of the physician).[33]

Contemporary authors who advance theories of critical reflection include Brookfield, Kemmis, Kinsella, and Greene[26–28,34–37] (see Table 1). In medical education, a scholar who has taken up theories related to critical reflection is Kumagai,[4,38] who has focused particularly on the works of Freire and Habermas and how they can be applied in medical education. Kumagai and Lypson[4] have applied these understandings of knowledge to educational innovations such as efforts to move students beyond cultural competence. They articulate a need to move from checklist approaches, wherein students memorize the "right" or "best" way to interact with a particular patient, toward a broader awareness of power relations and a desire to mitigate social inequity.[4] This approach thus suggests that, to provide good care for all patients, acquiring particular ways of performing desired skills must be accompanied by critically reflective *ways of being*—by which we mean embodied, enacted, enculturated views and virtues. Critical reflection is a thought process; critically reflective practice is a way of being and practicing that engages this process often or always.[26,39]

Box 1
Glossary of Terms Used in This Article as They Relate to Critical Reflection and Reflexivity

Agency: The capacity to act on the world, requiring the ability to see how social norms and values have come to be shaped by the structures of society.[45]

Critical: As a qualifier or adjective preceding reflection, reflexivity, or theory, critical means that there is a focus on a critique of current societal norms including assumptions, ideology, systems, structures, and power relations.[28,34,62]

Discourse (as an adjective: discursive): A socially-constructed and perpetuated, language-based system of meaning shaping (im)possible ways of thinking, speaking, and acting; e.g. the dominant discourse of disability as impairment of function within an individual means we think about and practice rehabilitation to help people regain "typical" function. An alternative discourse of disability as limitations imposed by society would move some of the burden of change to society, and implore us to broaden our conceptions of different ways of being able to function and live in the world.[73–75]

Epistemology: The philosophy of how we come to know what we know, including the methods considered to be valid ways of developing or gaining knowledge (as opposed to opinion).[8,12,76–78]

Equity: A way of thinking about what is just and fair, often contrasted with equality. Rather than equality in which all people would be given the same, or equal, opportunities and supports (e.g., all students entering into medical school pay the same tuition fee), an equitable approach might aim to remove barriers such as the effects of the lower socioeconomic status of a student that might preclude them from an opportunity (e.g., offering bursaries to students who meet the academic standards for entry to the medical school but lack the economic resources for tuition).[79]

Material: Relating to the physical objects and aspects constituting and constituted by society and culture,[80] e.g., medical charts, evidence-based practice guidelines.

Pedagogy: The theory and practice of teaching.

Praxis: The fusion of critically reflective thought and action.[29]

(Critical) Reflexivity

Reflexivity can be defined as recognizing one's own position in the world both to better understand the limitations of one's own knowing and to better appreciate the social realities of others. All reflexivity is thus by definition critical, as it specifically involves paying heed to power relations; however, some authors choose to use the longer term "critical reflexivity," which explicitly foregrounds their attentiveness to power. A reflexive practitioner would challenge her epistemological assumptions (how we know what we know) and the social and discursive factors that influence conceptions of legitimate knowledge, social norms, and values. Although reflexivity and critical reflection share goals of social improvement, reflexivity emphasizes how the discursively construed social world influences what, how, and by whom knowledge and social norms are constructed,[36] and so the solutions put forward in a reflexive approach will often involve changing structures and institutions. For example, a reflexive approach to disability may call into question its current definition (e.g., as an impairment within an individual), raise awareness of who stands to gain or maintain power from the ensuing practices of this definition (e.g., people currently without disabilities, rehabilitation professionals) and who is rendered less powerful by this discourse (e.g., people with disabilities), and seek to change the structures and processes that create and maintain this power imbalance.[40]

Recognizing one's own social position may broaden one's understanding of the experiences of others. Engaging in reflexivity requires challenging our own beliefs and assumptions about what is true and normal by first recognizing how these beliefs and assumptions are embedded in the social and cultural structures in which we were raised and trained and/or currently live and work. Continuing our example, a reflexive family doctor would, for example, notice that she was functioning within a health system that assumes that people who are not disabled are "normal"; in so doing she would problematize the current discourse of disability, in which the "problem" is located with the "disabled" patient rather than with the system to which they have to try to fit in.[40] This problematic discourse defers responsibility from society to create an environment that is inclusive, instead shifting the burden onto those who fall outside the perceived norm to "fit in." An inherent implication of reflexivity—that we are all (as part of society) party to oppressive forces—can make reflexivity quite difficult, particularly when it calls attention to one's own privileged position derived from belonging to a dominant cultural or social group.[41] For example, in Rowland and Kuper's[42] study of health care professionals who have also been patients, participants noted that one of the most painful parts of their experience was their reflexive realization of the ways in which they themselves (as health care providers) had contributed to the structures and processes that they then experienced so negatively as patients.

In one of the earliest uses of the term, Merton[43] described reflexivity as a self-fulfilling prophecy, in which a belief or expectation, whether correct or incorrect, affects the outcome of the situation and how individuals or groups behave to make that belief come true. Arguably, he and other early theorists conceived of reflexivity as problematic: that no action can be taken that is not influenced by the social world, which in turn influences the social world. More recent theorists, however, present reflexivity as the *solution* to overcoming the long-standing epistemological problem of structure (does society influence individual beliefs and behaviors?) versus agency (do individual beliefs, behaviors, and actions influence society?).[44]

Bourdieu, for example, argued that the social sciences are inherently constrained by our preconceptions; to overcome these limitations, we should seek to better understand our own positions by interrogating our social and cultural origins, our position in the field, and our knowledge claims.[45] Similarly, Foucault[46] proposed that history structures and organizes knowledge in the present; what is thinkable and knowable is shaped through the discourses we use, making it imperative that we consider the ways in which this constrains our thinking. Bourdieu and Foucault both challenged the properties of society normally taken for granted, how they came to be, how

they were naturalized, and who ends up benefiting and losing as a result. They also focused on issues of power: Foucault[46] sees discourses as trapping our thinking and practice, and Bourdieu[44] sees social structures as reproductive of social inequities. Critical reflexivity is about recognizing these "natural"-seeming forces, how we are implicated in producing and reproducing them, how they affect us, how we affect them, and that this is a dynamic process subject to change.

More contemporary scholars have explored the notion of critical reflexivity in relation to specific social constructs such as gender,[47–50] race,[51,52] experience of colonization,[53–55] and ability[40,56,57] (among others), as well as to the intersections between them. Patricia Hill Collins,[52] for example, has explored the ways in which her "outsider" status as a black woman in the academy enables her to notice (and seek to address) phenomena that go unremarked to those "insiders" for whom they seem normal and natural. Similarly, Said[53] has problematized the ways in which European and North American academics constructed people from Asia, the Middle East, and Africa as a "mysterious other," diminishing their voices and their power as part of the larger phenomenon of colonization. Crenshaw[58] introduced the term "intersectionality" to highlight the complexity of the ways in which these different social categories can overlap and the implications that has for power and knowledge. Although the experiences of the social groups highlighted by these writers differ, collectively their work helps us to identify our roles in maintaining structures and processes that seem "natural" and "normal" but may actually be amenable to change, and thus inspires us to act to improve our shared social world.

Implications for Teaching and Assessment

Aligning the academic traditions informing an educational approach with the teaching and assessment methods used is key to the quality and meaning of the educational efforts being employed.[59] Critical reflection and critical reflexivity share certain commitments; they both strive for social improvement and challenge existing power structures. We will thus explore not only the differences but also the common challenges and strategies for teaching, assessing, and evaluating critical reflection and reflexivity.

Teaching and assessing for critical reflection

For those teaching critical reflection in HPE, the overall goal congruent with the theoretical literature would be to teach students to approach their clinical work as a form of praxis. As noted above in our example of the family doctor working in relation to disability policies, praxis is critical theory–informed action. It is a fusion of reflection and action, specifically critical reflection and action.[29] At the organizational level, a critically reflective medical school might change its admissions criteria by removing a measure shown to be inequitable, based on theory-informed investigation. Critically reflective faculty and programs would aim to socialize students in a praxis-oriented culture (a praxis-oriented admissions process being a good start) and to orient them toward continually questioning their own assumptions about their practices and about their patients. Students would also be oriented toward creating incremental everyday improvements in their own practice contexts by actively challenging the assumptions and harmful relations embedded in their practices and protocols. Pedagogical practices aligned with these goals have been outlined by Baker et al,[59] Halman et al,[60] and Kumagai and Lypson,[4] and we share some examples in Table 2.

Curricular objectives for critical reflection focus on imbuing students with a particular, constantly questioning, way of seeing and being, rather than on building an agreed-upon "content" knowledge base. As such, notions that are key to critical reflection (such as recognizing and, at times, challenging established power relations) would need to be integrated throughout the formal and hidden curricula rather than simply taught in a particular lecture or course.[29] Similarly, faculty members would serve as role models and mentors who learn with and challenge students rather than as teachers who primarily transmit content knowledge; the specific curriculum content would be a vehicle for shaping ways of thinking and being.[4,38,61]

Assessment of critical reflection must also align with its philosophical and theoretical origins. Scholars of reflection have noted potential dangers in assessing or mandating reflective activities. Some have argued that through mandated submission of written representations of reflective thought, reflection becomes a form of surveillance; others argue that overly reductionistic approaches to assessing reflection miss the point and instead drive tokenistic or fabricated reflection.[14,24,62] These critiques have typically been levied at reflection (not critical reflection); given the emphasis on societal assumptions, norms, and values that adding criticality to reflection and reflexivity brings, we extend the cause for caution even further. Although it has often been argued that all assessment is a form of control,[63] one could easily

Table 2

Examples of Teaching, Assessment, and Evaluation Practices for Critical Reflection and Reflexivity

Concept	Examples of teaching practices	Possible assessment practices	Possible evaluation practices
Critical reflection	• Disrupting assumptions, and highlighting systemic problems, e.g., through simulations, stories, and cases[38,60] • Valuing and integrating personal knowledge[14,60]	• Assessing conversation foci/ content during debriefings • Examining responses to systems-navigation scenarios	• Content and discourse analyses of debriefings, essays, etc. • Evidence of changed practices • Patient experience reports
(Critical) reflexivity	• Facilitating dialogue as opposed to discussion[61] • Teaching social theory[64,72] • Arts/based and creative assignments	• Discourse analysis[64] • Social theory knowledge assessments (e.g., essays) • Artistic critique	• Content and discourse analyses of debriefings, essays, etc. • Evidence of changed practices • Patient experience reports

imagine that explicitly enforcing—through grading—particular ways of viewing the social world might cause discomfort amongst contemporary educators. However, there are at least two other options that might be less ethically fraught. There is a long history in the health professions of identifying values and norms (often delineated in codes of professional ethics) required of all practitioners while working as a member of the profession in the practice setting; contemporary examples of such values might include compassion and honesty. One could, therefore, assess students' abilities to enact or perform these profession-specific, agreed-upon values within the workplace. In addition, if critical reflection is taken up as part of an institutional shift to espousing and modeling particular values that are thought to improve patient care, then it would be appropriate to evaluate both the success of the school in enacting those values at the institutional level and the effect of those actions on patient care. However, these effects would need to be assessed in ways aligned with critical reflection. Although assessment aligned with critical reflection largely remains an area for further research,[59] a checklist approach to measuring a shift in perspective and values would likely not be congruent with the underlying principles of critical reflection. Instead, we have begun to explore approaches to assessing a person's shifted perspective, including, for example, analyzing conversations during simulation debriefings. Scholars have recently used discursive analysis approaches to assess learning about reflexivity, and we suggest that the same could be done for critical reflection.[64]

Teaching and assessing for critical reflexivity

While the overall goal of teaching critical reflection is to stimulate praxis, the overall goal for teaching critical reflexivity in HPE is to stimulate renewed agency. Agency means being able to act on society, which must begin with thinking of a better, more ethical world, outside the confines of our current ways of doing things.[44] One must be reflexive to have true agency as one must be able to think beyond the confines of current ways of thinking and knowing.[44] Continuing with the example above, if we wanted to assess critical reflection at the individual level, we would need to first *reflexively* conceive of and enact a way of assessing people that rethinks current definitions of assessment (i.e., creating a new conception of assessment informed by different assumptions/understandings of assessment). Here we see a point of overlap between critical reflection and reflexivity—creating new material assessment approaches by imagining assessment completely differently.

To teach reflexivity, students would need to be shown how to question their tacit assumptions not only about themselves—their own position and ways of being—but also about societal norms more broadly. They would need to learn how to "make strange" social phenomena that are routinely seen as normal but are actually socially constructed products of history and happenstance (e.g., definitions of family, competence, or disability).[65] These ways of thinking are routinely taught in social science faculties; HPE could borrow from these approaches.[8] For example, students would need to be taught to define specific concepts (i.e., equity, power) and work with a selection of important theoretical frameworks. They would also need to be educated about such topics as colonialism, homophobia, racism, and/or other similar forms of discrimination that might be faced by their patients. Faculty members would need to enable students both to acquire this knowledge and to use it as the basis for further questioning the assumptions underlying all knowledge claims.

Assessment of this social scientific knowledge could focus on how students apply key concepts in discussion, in writing, and in practice. Note here a key, yet subtle, difference. Critical reflection derives from praxis-oriented traditions; it is more focused on ways of seeing and being and thus fits less neatly into our traditional academic ways of assessing learning and performance. Critical reflection may therefore lend itself to more practice-based approaches to assessment. Meanwhile, critical reflexivity could be conceived of as being slightly more "traditional" in that it contains clearly agreed-upon sets of social science theory that learners could be tested on in terms of memory, understanding, and application. This said, the enactment of critical reflexivity as opposed to the understanding of critically reflexive bodies of theory would require similar assessment approaches to critical reflection such as those mentioned above. The ultimate goals of critical reflection and reflexivity overlap, so the assessment approaches might eventually converge around determining how perspectives and practices have shifted.[59]

Making Space for Criticality

None of the above suggestions for teaching, assessing, and evaluating critical reflection and reflexivity are possible without a philosophical and physical space for ways of knowing beyond those common in bioscience. Other scholarship has explored this, and we direct readers to these works.[38,61,66,67]

This article sets forth an opportunity to engage the concepts of critical reflection and reflexivity with more precision and nuance, and to take this approach to applying any social science or humanities concept to HPE. However, we do not intend to position critical reflection and reflexivity as infallible or static concepts, unable to evolve as they are continually applied. In fact, Brookfield[26] advocates that we ultimately turn the critically reflective process back on itself. We argue that we must problematize both critical reflection and reflexivity themselves. As these concepts become more popular, they also become more diluted, becoming "evacuated" of meaning (wherein the concepts mean everything and thus nothing) and ultimately reified, which means the concepts can become raised to a level of discourse well beyond their original contexts of origin. We can already see signs of evacuation of critical reflection (with countless assignments and portfolios claiming to teach and foster critical reflection but meaning vastly different things). Brookfield further cautions that we can get so caught up in our own promotion of critical reflection that we use it as a mechanism of exclusion and means to gain power. We also need to let go of the notion that we can and should see "linear progress," as if educators using and teaching for critical reflection become increasingly better educators, eradicating oppression one day at a time. Brookfield concludes that we must "apply the same rational skepticism to our own position that we apply to analyzing how dominant cultural values serve the interests of the few over the many. A critically reflective stance towards our

practice is healthily ironic, a necessary hedge against the belief that we have captured the one universal truth about good practice. It also works against uncritical development, and reification, of protocols of critical reflection."[26(p47)] We echo Brookfield's wise words, and stress that all scientific and SS&H concepts and methods be subject to continued scrutiny both from within their originating disciplines and in HPE. For critical reflection and reflexivity, continued research needs to focus on how they are learned, how they can and should be taught, how they can and should be assessed, and how the teaching and assessing of critical reflection or reflexivity might be evaluated for aligned and meaningful impacts. The purposes of critical reflection and reflexivity are *not* to lead to a singular, fixed, right way of being, seeing, and thinking but, rather, to inspire continual questioning of the assumptions underlying one's ways of being, seeing, and thinking. As we move toward implementing these approaches more thoughtfully, evaluation approaches must also be aligned and appropriate. This continued questioning and aligned evaluation are core to both the ongoing development of the HPE field and that of health professionals' thinking and practice.

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