Educational strategies to enhance reflexivity among clinicians and health professional students: a scoping study
Educational Strategies to Enhance Reflexivity Among Clinicians and Health Professional Students: A Scoping Study

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Abstract: Reflexivity involves the ability to understand how one’s social locations and experiences of advantage or disadvantage have shaped the way one understands the world. The capacity for reflexivity is crucial because it informs clinical decisions, which can lead to improvements in service delivery and patient outcomes. In this article, we present a scoping study that explored educational strategies designed to enhance reflexivity among clinicians and/or health profession students. We reviewed articles and grey literature that address the question: What is known about strategies for enhancing reflexivity among clinicians and students in health professional training programs? We searched multiple databases using keywords including: reflexivity, reflective, allied health professionals, pedagogy, learning, and education. The search strategy was iterative and involved three reviews. Each abstract was independently reviewed by two team members. Sixty-eight texts met the inclusion criteria. There was great diversity among the educational strategies and among health professions. Commonalities across strategies were identified related to reflective writing, experiential learning, classroom-based activities, continuing education, and online learning. We also summarize the 19 texts that evaluated educational strategies to enhance reflexivity. Further research and education is urgently needed for more equitable and socially-just health care.

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Key words: reflexivity; health professional education; practicing health professionals; scoping study

1. Introduction

672) explains that the term reflection carries "multiple meanings, ranging from the 'act of thinking' to 'critical assessment of presuppositions,' and from 'contemplation' to 'acting with awareness.'" In this article, we focus on one aspect of critical reflection that we term reflexivity.
Our definition of reflexivity aligns with DOHN's "critical assessment of presuppositions" and similar understandings in qualitative research (MRUCK & BREUER, 2003). Specifically, we are concerned with the ability to understand how one's own social locations and experiences of advantage or disadvantage have shaped the way one understands the world and produces knowledge (LAM, WONG & LEUNG, 2007; OTERHOLM, 2009; SMITH, 2011).

Capacity for reflexivity is crucial for health care providers because it informs clinical decisions, which can improve service delivery and patient experiences of care (SMITH, 2011). Ching Man LAM et al. frame this approach to reflexivity as a process of thinking critically about the basis of our own knowledge claims, becoming "more than benign introspection" (2007, p.95). Furthermore, insight about one's relation to structures of privilege and oppression are crucial for enabling clinicians to understand and address health inequities (BROWN, 2012; D'CRUZ, GILLINGHAM & MELENDEZ, 2007). This framing of reflexivity aligns with Donald SCHÖN's "reflection-in-action" (1983, p.ix), which involves critically analyzing the construction of professional practice. This approach requires analysis of the power relations and hegemonic assumptions guiding one’s actions as an opening for imagining and enacting equity-promoting care (MANN et al., 2009). Our team comprises a group of 11 interdisciplinary health researchers, clinicians, students and community advocates, who work in the fields of global health and HIV, in cross-cultural, resource-poor and resource-rich settings. All are involved in the training of future health professionals. Furthermore, all co-authors have reflexively engaged with the influence of their own positions of privilege and oppression in shaping how they see the world. Challenges and successes related to nurturing our own reflexivity as educators, clinicians and advocates led to our interest in this inquiry. Specifically, the team coalesced around a shared interest in better understanding how to develop reflexivity among health care providers in order to be able to provide competent and ethical care for diverse patients in a myriad of settings. Early exploration of the topic revealed a lack of coherent literature on this topic, which led to our decision to conduct a scoping study as an initial step to map out what is known in this field.

Reflexivity is a skill that requires teaching and ongoing learning throughout clinicians’ careers. Yet education to nurture reflexivity is either absent or underdeveloped within many clinical training and professional development settings (KAI, BRIDGEWATER & SPENCER, 2001; MANN et al., 2009; SCHIFF & RIETH, 2012). The result is a potential competency gap among health care providers who may have strong technical training but little understanding of reflexivity and its essential role in patient care. Furthermore, the evidence base for how to nurture reflexivity among health professionals is a work in progress. In their systematic review of 29 studies of reflective practice in the health professions, Karen MANN et al. (2009, p.596) note that activities to promote reflection (including and beyond reflexivity) are being incorporated into undergraduate, postgraduate and continuing education across a variety of health professions despite there being "surprisingly little [evidence] to guide educators in their work to understand and develop reflective ability in their learners." The literature base is even less developed in terms of educational strategies that develop reflexivity related to one’s social locations. As Elizabeth SMITH (2011, p.212) explains, little is known about the "difficulties, practicalities and methods" related to nurturing reflexivity or the "issues of teaching the theory and practice of critical reflections in academic contexts."

Our research seeks to advance the field by focusing on educational strategies designed to nurture reflexivity within the health professions. Specifically, in this article we present a scoping study that explored what is known about educational strategies for enhancing reflexivity among clinicians and/or students in health professional training programs. Below, in Section 2 we describe the iterative process of our scoping study, in Section 3 we present salient characteristics of the studies identified by the search and, finally, in Section 4 we discuss implications for future education and research.
2. Methods
We conducted a scoping study following the framework introduced by Hilary ARKSEY and Lisa O'MALLEY (2005) and advanced by Danielle LEVAC, Heather COLQUHOUN and Kelly K. O'BRIEN (2010). The intent of scoping studies is to conduct a literature review and consultation phase that may be used to: 1. examine the extent, range and nature of research activity, 2. determine the value of undertaking a full systematic review, 3. summarize and disseminate research findings, or 4. identify research gaps in the existing literature (ARKSEY & O'MALLEY, 2005). We felt a scoping study was the most appropriate methodological design to map out the literature in this field as it allows for a rigorous examination of expansive topics and allows for the inclusion of many study designs.

2.1 Stage 1: Identifying the research question
We focused on the question: What is known about educational strategies for enhancing reflexivity among clinicians and students in health professional training programs? We understood "educational strategy" to include any activity that promotes knowledge, including traditional in-class curricula and non-traditional methods of learning outside a classroom.

2.2 Stage 2: Identifying relevant literature
We sought published academic articles and grey literature that addressed topics related to reflexivity and educational strategies. We engaged a health sciences librarian to assist in developing search terms and a search strategy and to both identify and search the most relevant databases. The health sciences librarian identified the following databases: CINAHL, EMBASE, ERIC, IPA, PubMed, OTSeeker and PEDro. We searched these databases, and not large multidisciplinary databases, as we were specifically interested in the health and education literature and were advised these databases covered the literature. Our search was limited to texts published in English available as of January 1, 2013. Search terms included "reflexivity OR reflexive OR critical reflection OR self reflection OR reflective" and "allied health personnel OR clinicians OR physicians OR nurses OR doctors OR pharmacists OR students OR health professionals." Texts identified by our search strategy were imported into the data organization software, RefWorks.

2.3 Stage 3: Study selection
All authors were involved in the review process. Criteria for inclusion were iteratively revised three times, such that three reviews of relevant literature were completed (see Figure 1). The first two reviews were conducted to broadly identify literature pertaining to reflexivity and education, and the third review was conducted to specifically identify literature pertaining to educational strategies to enhance reflexivity training in health professional training. In the first review, two team members independently read the title and abstract for each text to determine inclusion. The inclusion criterion was that texts addressed reflexivity in relation to health care providers or students whereby "reflexivity" included any of the following:
1. the ability to critically reflect on one's own social locations or belief systems in relation to larger social norms and/or,
2. recognition of how one's social locations, privileges, advantages, disadvantages or positions of dominance may shape the way one sees and understands the world and/or,
3. the concept of critical reflection.
After the first review, we narrowed our definition of reflexivity to remove the third criterion and, therefore, to exclude texts that only addressed critical reflection on clinical issues without attention to one's social locations. In the second review, two reviewers independently assessed each of the previously identified texts using these revised inclusion criteria. When the conceptualization of reflexivity remained ambiguous in the abstract, full texts were reviewed. A
third two-person review was then conducted to identify texts that presented an educational strategy for enhancing reflexivity. Members of the study team met between each review to ensure that inclusion criteria were interpreted and applied consistently. When reviewers did not agree on inclusion or exclusion of a text, the text was reviewed and consensus was reached by three members of the research team.

2.4 Stage 4: Charting the data
Relevant data from each of the included references were extracted by members of the research team and recorded in a Microsoft Excel spreadsheet. Data captured included population studied, country of study, year of publication, study objectives, article type, methodology, educational strategies used, methods of evaluating reflexivity-enhancing strategy, outcomes measured, authors’ findings, and authors’ conclusion.

2.5 Stage 5: Collating, summarizing and reporting the results
Using a modified conventional content analysis approach (HSIEH & SHANNON, 2005), we grouped the identified educational strategies into categories to address the research question. We then descriptively synthesized the subset of texts that empirically evaluated strategies for enhancing reflexivity.

3. Results
Our initial search of the literature identified 2,543 texts, of which 1,570 met inclusion criteria. Once the definition of reflexivity was revised, the second review identified 157 texts that met inclusion criteria. The third review identified 68 texts that discussed at least one educational strategy for enhancing reflexivity (Figure 1).

Figure 1: The iterative study selection process (modified PRISMA 2009 flow diagram, (MOHER, LIBERATI, TETZLAFF & ALTMAN, 2009, p.267)

3.1 Characteristics of included texts
Below we present the scoping study results in three parts. First, we describe the characteristics of the 68 included texts. Second, we present findings about the strategies for enhancing reflexivity among clinicians and health profession students. Finally, we describe characteristics of the subset of 19 texts that included empirical evaluations of strategies to enhance reflexivity.

Sixty-eight texts presented educational strategies for enhancing reflexivity among clinicians and/or health professional students (Table 1).

<table>
<thead>
<tr>
<th>Author</th>
<th>Educational Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABEDINI, GRUPPEN, KOLARS &amp; KUMAGAI</td>
<td>One-week international service learning trip for American medical students in Cuba, Dominican Republic, Guatemala, Jamaica or Peru</td>
</tr>
<tr>
<td>ADAMSHICK &amp; AUGUST-BRADY</td>
<td>International cultural immersion experience for American nursing students in Honduras</td>
</tr>
<tr>
<td>ANDREWS et al. ARND-CADDIGAN, AVERETT &amp; POZZUTO</td>
<td>Narrative pedagogy in nursing education Reflective judgment and ill-structured problem activities with social work students</td>
</tr>
<tr>
<td>ASH et al.</td>
<td>A self-directed learning resource for practicing nurses on cultural safety, nursing care for Indigenous People with cancer, with video vignettes and reflective exercises</td>
</tr>
<tr>
<td>BALLON &amp; SKINNER</td>
<td>Educational reflection techniques in addiction psychiatry training, including reflection discussions and reflective journaling</td>
</tr>
<tr>
<td>BANKS, CLIFTON, PURDY &amp; CRAWSHAW</td>
<td>Critical reflection on clinical supervision as &quot;a confessional act&quot;</td>
</tr>
<tr>
<td>BARRETT</td>
<td>A curriculum to promote culturally integrated behaviors among allied health students</td>
</tr>
<tr>
<td>BENDER</td>
<td>Integrating cultural competency into physiotherapy (PT) training curricula</td>
</tr>
<tr>
<td>BHOGAL &amp; BRUNGER BINDING, MORCK &amp; MOULES</td>
<td>Strategies for cross-cultural communication and critical reflection in the context of prenatal genetic counseling for family physicians Reflective writing to &quot;see the other&quot; in student nurses</td>
</tr>
<tr>
<td>BOLTON BOROVOY &amp; HINE</td>
<td>Reflective expressive writing for healthcare providers A critical approach to cultural competence for American health care professionals regarding diabetes care for elderly Russian Jewish emigres</td>
</tr>
<tr>
<td>BRANCH &amp; ANDERSON</td>
<td>Storytelling as a means of reflective thinking and writing among student nurses</td>
</tr>
</tbody>
</table>
| BROWNE et al. BRUNGER & DUKE | Cultural safety in a social justice curriculum for nursing practice 1st year medical curriculum to integrate critical self-reflections,
<table>
<thead>
<tr>
<th>Authors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DASGUPTA &amp; CHARON</td>
<td>Reflective writing of personal illness narratives for medical students</td>
</tr>
<tr>
<td>DELANY &amp; WATKIN EPSTEIN</td>
<td>Six-week, 3 hour/week critical reflection program for PT students to reflect on critical incidents during first clinical placements</td>
</tr>
<tr>
<td>FOSTER GLAZE</td>
<td>Mindfulness and mindful practice in medicine</td>
</tr>
<tr>
<td>DELANY &amp; WATKIN EPSTEIN</td>
<td>Cultural humility through a north-south collaboration between nurses in the United States and Dominican Republic</td>
</tr>
<tr>
<td>GLAZA</td>
<td>Pre-entry and advanced reflective practice learning modules in nursing</td>
</tr>
<tr>
<td>GREENWOOD, WRIGHT &amp; NIELSEN</td>
<td>Education for dialogue and dialogic relationships</td>
</tr>
<tr>
<td>EPSTEIN</td>
<td>Cultural safety and reflexivity education related to child and family health nursing</td>
</tr>
<tr>
<td>GROBLER, VAN SCHALKWYK &amp; WAGNER</td>
<td>Curriculum to develop reflective practitioners in a South African orthotics/prosthetics training program</td>
</tr>
<tr>
<td>GUPTA</td>
<td>Interdisciplinary service learning course to enhance civic engagement</td>
</tr>
<tr>
<td>HALABI, MAJALI, CARLSSON &amp; BERGBOM</td>
<td>An international nursing exchange in Sweden and Jordan guided by FREIRE's theory of dialogical action</td>
</tr>
<tr>
<td>HAYWARD &amp; CHARRETTE</td>
<td>A 2-semester capstone course to integrate culturally competent care, including an international service-learning (ISL) experience for American physical therapy students in Ecuador, cultural awareness activities and reflective journaling</td>
</tr>
<tr>
<td>HEATH</td>
<td>Models of guided reflection in nursing</td>
</tr>
<tr>
<td>HOPPES, HAMILTON &amp; ROBINSON</td>
<td>Autoethnography in occupational therapy student training</td>
</tr>
<tr>
<td>HUMPHREY</td>
<td>A 3-stage model of critical reflection used with social work students</td>
</tr>
<tr>
<td>IEDEMA</td>
<td>Critical reflection on video of real-time everyday clinical practice and patients' stories</td>
</tr>
<tr>
<td>ISSITT</td>
<td>A model of critical reflective practice for health promotion</td>
</tr>
<tr>
<td>JENSEN &amp; PASchal</td>
<td>Strategies to develop habits of mind, critical self-reflection and virtuous practice among PT students</td>
</tr>
<tr>
<td>JOHNSTON</td>
<td>A human behavior social work diversity course to teach students to &quot;think outside the box,&quot; including book analyses, creative expression and a comfort zone experience</td>
</tr>
<tr>
<td>KARBAN &amp; SMITH</td>
<td>Embedded critical reflection in an integrated strategy for interprofessional learning</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Description</td>
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<tr>
<td>---------------------------------</td>
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</tr>
<tr>
<td>Kaylor</td>
<td>A course for allied health students on values, using reflexiveness as the course's structural principle</td>
</tr>
<tr>
<td>Kim</td>
<td>A 3-phase critical reflective inquiry model for student and practicing nurses</td>
</tr>
<tr>
<td>Koskinen et al.</td>
<td>Reflective writing using &quot;critical incident technique&quot; in a trans-Atlantic exchange program for Canadian and European rural community nursing students</td>
</tr>
<tr>
<td>Kowal &amp; Paradies</td>
<td>A workshop to facilitate critical reflection among public health practitioners on how race and culture construct Indigenous ill-health</td>
</tr>
<tr>
<td>Lam et al.</td>
<td>Reflective logs of autobiographical stories by social work students during fieldwork placement</td>
</tr>
<tr>
<td>Larson &amp; Allen</td>
<td>Conscientization for Canadian social work students during an intense experiential course in Mexico, involving a reflective final paper</td>
</tr>
<tr>
<td>Lattanzi &amp; Pechak</td>
<td>Curricular strategies to prepare American PT students for diverse, global practice in Niger, Tanzania and Ecuador, including ISL and video conferencing</td>
</tr>
<tr>
<td>Lawler</td>
<td>Reflective essays about community-based service learning projects for adult nursing students</td>
</tr>
<tr>
<td>Lie, Shapiro, Cohn &amp; Najm</td>
<td>Written reflection and reflective discussions in family medicine clerkships</td>
</tr>
<tr>
<td>McDonald, Carnevale &amp; Razack</td>
<td>Cultural training workshop for pediatric residents, with activities to make familiar strange and vice versa</td>
</tr>
<tr>
<td>Maltby &amp; Abrams</td>
<td>Reflective journals during international immersion experiences for American student nurses in Bangladesh</td>
</tr>
<tr>
<td>McAllister</td>
<td>Critical education through reflective practice and dialectical critique in nursing</td>
</tr>
<tr>
<td>Miller</td>
<td>Journal writing reflecting on gerontology rotation for nurses</td>
</tr>
<tr>
<td>Mkindawire-Valhmu &amp; Doering</td>
<td>A community health study abroad program in Malawi for American nursing students using a postcolonial feminism framework, and involving experiential learning and reflective journaling</td>
</tr>
<tr>
<td>Murray-Garcia, Harrell, Garcia, Gizzi &amp; Simms-Mackey</td>
<td>Using racial identity theory to inform self-reflection in multicultural education, using the example of medical students in the United States</td>
</tr>
<tr>
<td>Nairn, Chambers, Thompson, McGarry &amp; Chambers</td>
<td>Applies MEZIROW's principles of reflexivity within the broader perspective of BOURDIEU's habitus to inform critical reflection in nursing education</td>
</tr>
<tr>
<td>Newcomb, Cagle &amp;</td>
<td>Guided discussions and written reflections on readings from two</td>
</tr>
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<tr>
<td>Name</td>
<td>Description</td>
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</tr>
<tr>
<td>WALKER</td>
<td>Fictional texts, &quot;The House on Mango Street&quot; by CISNEROS (1988) and &quot;The Bluest Eye&quot; by MORRISON (1970), among nursing students in the United States</td>
</tr>
<tr>
<td>NIXON et al.</td>
<td>A liberation pedagogical model to facilitate education about diversity among family therapy students in the United States</td>
</tr>
<tr>
<td>OTERHOLM</td>
<td>An online course for social work students in Norway reflecting on field placement critical incidents through online chat, a virtual forum, and reflection papers</td>
</tr>
<tr>
<td>PARKER &amp; MYRICK</td>
<td>Clinical scenarios using human patient simulation to promote transformative learning events in undergraduate nursing education in Canada</td>
</tr>
<tr>
<td>PHILLIPS, FAWNS &amp; HAYES</td>
<td>Using positioning theory and &quot;professional conversations&quot; to support transformative learning within midwifery curricula</td>
</tr>
<tr>
<td>SANTALUCIA &amp; JOHNSON</td>
<td>Transformational learning activities for occupational therapy (OT) students, including journaling, reflective discussions, storytelling, an &quot;aha moment&quot; exercise</td>
</tr>
<tr>
<td>SCHUESSLER, WILDER &amp; BIRD</td>
<td>Reflective journaling about community clinical experiences</td>
</tr>
<tr>
<td>SHAW &amp; ARMIN</td>
<td>Critical approaches to cultural competence training for health care providers</td>
</tr>
<tr>
<td>SMITH</td>
<td>A model of forms, domains and indicators of critical reflection for healthcare higher education</td>
</tr>
<tr>
<td>SPERSTAD</td>
<td>Guided critical reflection based on a nursing cultural immersion experience for American students with a Mexican-American community</td>
</tr>
<tr>
<td>TILBURT WILSON</td>
<td>Worldview consciousness training for health disparities education</td>
</tr>
<tr>
<td>WEAR, ZARCONI, GARDEN &amp; JONES</td>
<td>Education session for nursing students about Native American patients receiving dialysis using a sacred circle model</td>
</tr>
<tr>
<td>WELLARD &amp; BETHUNE</td>
<td>Reflective journal writing in nursing education</td>
</tr>
<tr>
<td>WEPA</td>
<td>Reflective diaries on action research among cultural safety educations in New Zealand</td>
</tr>
<tr>
<td>WHITEFORD</td>
<td>Narratives to reflect on experience of working with patients of different cultures during occupational therapy training</td>
</tr>
<tr>
<td>WILLIAMS</td>
<td>Cultural safety guidelines and reflective questions for public health practitioners working with Indigenous People</td>
</tr>
</tbody>
</table>

Table 1: Educational strategies reported for enhancing reflexivity (n=68 texts)
Of the 68 texts, 65 were peer-reviewed articles (96%), 2 were dissertations (3%) and 1 was a grey literature report (1%). The 65 peer-reviewed articles were published in 47 different journals. Overall, authors of the 68 texts discussed strategies for enhancing reflexivity in a variety of health professions (Figure 2). The disciplines most commonly targeted by educational strategies to enhance reflexivity were nursing (38%), followed by medicine (16%), social work (9%) and PT (7%). Authors of 10 texts described strategies that targeted multiple health disciplines.

![Figure 2: Types of health disciplines targeted by educational strategy (students, clinicians and/or faculty) (n=68 texts)](image)

Although we did not limit our search strategy by date, all but one of the 68 texts were published after 1996, with the majority published after 2008 (Figure 3).
The first authors of included texts were from 10 different countries, and most commonly from the United States (50%), United Kingdom (15%), Australia (13%) and Canada (12%). All first authors were from high-income countries with the exception of two articles first authored by scholars in Jordan and South Africa, which are considered upper-middle income countries (WORLD BANK, 2015).

3.2 Strategies for enhancing reflexivity among clinician and health profession students

Of the educational strategies to enhance reflexivity in the 68 included texts, no strategy was described more than once (see Table 1). However, there were common characteristics identified among subsets of the educational strategies. In Tables 2a-f we present results related to six common characteristics that may be relevant to health professions educators: reflective writing, experiential learning, classroom-based activities, continuing education strategies, online strategies, and strategies that invoked the theories of Paulo FREIRE and/or Jack MEZIROW.

Reflective writing was a component in the educational strategies of 25 texts.

<table>
<thead>
<tr>
<th>Type of Reflective Writing Strategy</th>
<th>References</th>
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<tbody>
<tr>
<td>Autoethnography</td>
<td>HOPPES et al., 2007</td>
</tr>
<tr>
<td>Autobiographical stories</td>
<td>LAM et al., 2007</td>
</tr>
</tbody>
</table>
Another common mechanism (n=14) for promoting enhancement of reflexivity was experiential learning whereby learners developed insights through participation in health-related activities in a real-world setting.

<table>
<thead>
<tr>
<th>Experiential Learning</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local community-based experiential learning</td>
<td>GUPTA, 2006; LAWLER, 2008; SCHUESSLER et al., 2012; SPERSTAD, 2010</td>
</tr>
</tbody>
</table>

Table 2b: Strategies involving experiential learning

Twelve texts described educational strategies that were conducted in a classroom setting for health profession students. The specific classroom-based activities were diverse with no patterns of activities across texts. Furthermore, authors commonly described more than one activity as part of a multi-faceted approach to enhancing reflexivity.

<table>
<thead>
<tr>
<th>Health Professional Students Involved in Classroom-Based Activities</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing students</td>
<td>BRANCH &amp; ANDERSON, 1999; NEWCOMB et al., 2006; PARKER &amp; MYRICK, 2010; WALTON, 2011</td>
</tr>
<tr>
<td>Medical students</td>
<td>BALLON &amp; SKINNER, 2008; BRUNGER &amp; DUKE, 2012; MACDONALD et al., 2007</td>
</tr>
<tr>
<td>PT students</td>
<td>HAYWARD &amp; CHARRETTE, 2012; JENSEN &amp; PASHAL, 2000</td>
</tr>
<tr>
<td>Social work students</td>
<td>ARND-CADDIGAN et al., 2010; JOHNSTON, 2009</td>
</tr>
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</table>
14 texts described strategies to educate practicing health care providers: five texts for nurses, three for physicians, three for health promotion or public health practitioners, and texts for health care providers in general. Three of these texts focused on critical reflection and cultural safety to enhance care with Indigenous Peoples in particular.

### Health Professionals Involved in Continuing Education

<table>
<thead>
<tr>
<th>Health Professionals Involved in Continuing Education</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses</td>
<td>ASH et al., 2010; GREENWOOD et al., 2006; HALABI et al., 2011; HEATH, 1998; KIM, 1999</td>
</tr>
<tr>
<td>Physicians</td>
<td>BHOGLAL &amp; BRUNGER, 2010; EPSTEIN, 1999; MACDONALD et al., 2007</td>
</tr>
<tr>
<td>Health Promotion/Public Health</td>
<td>ISSITT, 2003; KOWAL &amp; PARADIES, 2005; WILLIAMS, 1999</td>
</tr>
<tr>
<td>General Health Care Professionals</td>
<td>BOROVOY &amp; HINE, 2008; IEDEMA, 2011; SHAW &amp; ARMIN, 2011</td>
</tr>
</tbody>
</table>

Table 2d: Continuing education strategies for practicing health care providers

Six of the texts included online components in their strategies to enhance reflexivity.

### Online Strategies

<table>
<thead>
<tr>
<th>Online Strategies</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posting reflective questions</td>
<td>HAYWARD &amp; CHARRETTE, 2012</td>
</tr>
<tr>
<td>Facilitating communication in out-of-country placements</td>
<td>KOSKINEN et al., 2009; LATTANZI &amp; PECHAK, 2012</td>
</tr>
<tr>
<td>Delivering reflexivity-enhancing curricula</td>
<td>OTERHOLM, 2009; SANTALUCIA &amp; JOHNSON, 2010; SHAW &amp; ARMIN, 2011</td>
</tr>
</tbody>
</table>

Table 2e: Online educational strategies

Of the texts that explicitly based their strategies on educational theory, FREIRE (n=12) and MEZIROW (n=15) were referenced most often for their work related to pedagogies of adult learning and education.

### Approaches Based on FREIRE and MEZIROW

<table>
<thead>
<tr>
<th>Approaches Based on FREIRE and MEZIROW</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authors who evoked FREIRE and/or MEZIROW's theories as part of literature review on developing reflexive skills</td>
<td>ABEDINI et al., 2012; BANKS et al., 2013; ISSITT, 2003; KIM, 1999; McALLISTER, 2005; SMITH, 2011</td>
</tr>
<tr>
<td>Authors who referenced MEZIROW's model of reflection</td>
<td>BINDING et al., 2010; ISSITT, 2003; NAIRN et al., 2012; SMITH, 2011; WEAR et al.,</td>
</tr>
</tbody>
</table>
Table 2f: Approaches based in the pedagogy of FREIRE and MEZIROW

| Authors who referenced FREIRE’s development of critical consciousness | 2012 |
| Authors who referenced FREIRE’s pedagogy of adult education | KARBAN & SMITH, 2009 |
| BROWNE et al., 2009; HALABI et al., 2011; LARSON & ALLEN, 2006 |

3.3 Studies evaluating educational strategies to enhance reflexivity

Of the 68 texts that described educational strategies, 19 presented empirical evaluations of educational strategies designed to enhance reflexivity among clinicians and clinical students (Table 3). Below we summarize characteristics of these studies.

Table 3 here: Characteristics of studies that evaluated educational strategies designed to enhance reflexivity (n=19)

3.3.1 Study design

Thirteen of the 19 studies exclusively used qualitative approaches to evaluate reflexivity; the remaining six studies reported using both quantitative and qualitative study designs. Data in the qualitative studies were generated from interviews, focus groups and/or written reflective texts. Several quantitative assessment tools were used in the mixed methods studies: the "Transcultural Nursing Immersion Experience Questionnaire" (SPERSTAD, 2010), SHRAW’s "Personal Epistemology Scale" (ARND-CADDIGAN et al., 2010), the "Professionalism in Physical Therapy Core Values Survey" (HAYWARD & CHARRETTE, 2012) and the "Cross Cultural Adaptability Inventory" (ibid.).

3.3.2 Participant characteristics

Participants were graduate and/or undergraduate clinical students in all 19 studies, with the addition of clinical instructors in one text (ANDREWS et al., 2001). Students were most commonly in nursing programs (n=9), with four studies involving social work students, three studies involving medical trainees, two studies with PT students, and one study with health science students. Study sample sizes ranged from 7 to 188 participants, with most studies involving less than 50 participants (number of participants was not stated in two studies).

3.3.3 Characteristics of educational strategies being evaluated

Educational strategies varied across studies. While similar educational strategies were used in several studies (e.g., reflective writing), in no case was an identical strategy used in multiple studies. In most studies, multiple educational activities were used in combination. Similarly, there was little consistency in the concepts or constructs studied across the evaluations as indicators for enhanced reflexivity (e.g., cultural competence, cultural awareness, meanings attributed to a cultural learning experience, development of personal epistemology, attitudes, and conscientization). The length of time of the educational strategies varied greatly, with the shortest intervention lasting one hour (WALTON, 2011) and the longest lasting two years (HAYWARD & CHARRETTE, 2012). Most strategies (n=16) lasted from one week to four months. In all 19 studies, authors reported positive effects of their interventions on the development of some aspect of reflexivity among learners (see Table 2a-f).

4. Discussion

To our knowledge, this is the first study to comprehensively and systematically scope the peer-reviewed and grey literature regarding educational strategies used for enhancing reflexivity.
among clinicians and students in clinical health professional training programs. Given the widely-accepted role of political, social, historical and economic determinants in shaping health (CSDH, 2008), reflexivity about one's positions of privilege and oppression becomes a vital tool for improving patient care (KINSELLA & WHITEFORD, 2009; LAM et al., 2007; SCHIFF & RIETH, 2012; SMITH, 2011). By presenting a snapshot of the literature on strategies for enhancing reflexivity, this scoping study offers a foundation for advancing education in this important area by describing what is known and not known about reflexivity in health professional curricula. In particular, this study offers educators and education researchers a description of diverse strategies for enhancing reflexivity among health professionals. This article presents a comprehensive depiction of strategies, as presented in the literature at this point in time, upon which educators can build and mature the field.

4.1 About strategies to enhance reflexivity
A striking finding was the lack of consistency across educational strategies for enhancing reflexivity. Not a single strategy was employed in a consistent way across more than one of the 38 texts. Even texts that engaged common approaches (e.g., immersive experiences, reflective writing) used these approaches differently. This finding affirms that the field is under development, with a diverse array of strategies for nurturing reflexivity amongst students and clinicians that can be tailored to the fit the learners and learning context. However, this lack of consistency also makes it difficult to compare across interventions, signaling a direction for future research. Creativity and thoughtfulness appear to be at the core of many approaches, which offers a welcoming environment to educators new to this field. Unfortunately, this scoping study also found that there is little evidence to guide educators in nurturing reflexivity among students or clinicians; less than one-third of the included studies involved empirical inquiries related to the educational strategies. Future research is crucial for exploring processes related to the development of reflexivity, particularly from research approaches deriving from interpretivism that enable understanding of meaning-making, and critical theory that take into account the broader sociopolitical forces that influence the educational process.

We also note the wide range of disciplines reflected in the included texts, demonstrating the relevance of reflexivity across the health professions and the opportunity for interprofessional education related to reflexivity (KUPER & WHITEHEAD, 2012). This insight is particularly relevant given the relationship between reflexivity and the non-expert competencies that underpin licensure requirements for many health professions (KUPER & D’EON, 2011), such as CanMEDS, which is a national educational framework that describes desired medical and non-medical competencies for students attending Canadian medical schools (CanMEDS, 2014) or the parallel framework for physical therapists (NATIONAL PHYSIOTHERAPY ADVISORY GROUP, 2009). While the included texts involved multiple disciplines, we note that 38% targeted a nursing audience. This finding suggests that the development of reflexivity may have more traction in nursing and that other disciplines may learn from the work in this field. Finally, it is noteworthy that the first author of every text was from either a high-income or upper-high income country, which may reflect a limitation of the study in that we only included English texts. This finding could also reflect that teaching about reflexivity may occur more often in countries with greater economic privilege, supported by the finding that many experiential learning strategies occurred in resource-poor contexts. However, structures of privilege and oppression exist in all education and health environments and, thus, strategies to develop awareness of one’s relation to these structures are important in all settings.

Another key finding in this scoping study was the lack of conceptual clarity within the literature regarding the term “reflexivity.” The range of meanings presented challenges for our search strategy, which required an iterative fine-tuning of our inclusion and exclusion criteria.
Additionally, reflexivity and reflection are often conflated, which is exacerbated by the fact that certain reflection activities may be used to enhance reflexivity. Furthermore, lack of consensus on a single conceptualization of reflexivity means there is not a coherent body of literature on reflexivity to guide health professions educators. This is a complex topic made even more difficult for newcomers to grasp because of the diversity of ways that reflexivity can be understood. This lack of conceptual consistency also presents challenges for discussions within and across disciplines. We focused on the version of reflexivity that involves personal introspection related to one’s own social locations, and the implications for equity and justice. This is not a requirement of other versions of reflexivity in the literature, which refers instead to critical reflection on certain aspects of practice (e.g., one’s clinical reasoning) but not on oneself. Our framing and its concern with privilege and oppression may account for the one-third of included texts that explicitly invoked the justice-oriented theories of MEZIROW or FREIRE (DASGUPTA et al., 2006). Overall, there is great capacity-building potential among educators about these various understandings and how they are relevant to the clinical process. The majority of texts included in this scoping study were published in the last 10 years. A direction for future research is the archeology of the concept of "reflexivity" and the multiple ways it has been understood in different health disciplines and in relation to non-health fields including qualitative research methodology (see MRUCK & BREUER, 2003). Looking forward, deepened consensus on the elements that constitute reflexivity within the clinical care context may help bridge and advance efforts across health professions.

4.2 Limitations
We did not seek to critically analyze the evidence on strategies for enhancing reflexivity nor to synthesize their results; this work was beyond the scope of this study but is an area for future research. Likewise, future research could unpack the ways in which various strategies for enhancing reflexivity relate to different components of reflexivity, such as which educational strategies best address attention to institutional power structures or ontological differences. A key limitation is that the literature search was conducted to the end of 2012. The trend in increasing publications on this topic in recent years suggests that additional research may have been published since 2013, which should be included in a future review. Another limitation is our definition of "reflexivity," given its multiple meanings and, further, that the understanding of reflexivity for this paper is also known by other terms. As such, it was difficult to ensure sufficient breadth of search terms to capture all relevant texts. For example, "transformative education" shares conceptual terrain with our definition of reflexivity yet fell outside the scope we set for our search. This is a limitation of this study, but also a challenge for the field in general given such diversity in language and conceptualizations related to reflexivity. ARKSEY and O’MALLEY (2005; see also LEVAC et al., 2010) suggest a consultation phase as an optional sixth step in their scoping methodology. A future consultation with key informants regarding reflexivity and curriculum development could provide insight on this point and contribute to building a common language for enhancing reflexivity amongst health professionals.

5. Conclusion
The results of this scoping study are hopeful given that we found far-ranging evidence of educators inviting learners to question the status quo. This study identified 68 examples of strategies to help learners recognize their own experiences of privilege and oppression, so that they are better able to act on those understandings to change dominant systems. While evidence of the impact of these educational strategies is limited, this scoping study offers educators a menu of options for building capacity in reflexivity in various contexts (e.g., online, classroom-based), using diverse approaches (e.g., reflective writing, experiential learning) to a variety of audiences (e.g., students and clinicians across health disciplines). Further education
scholarship is required to advance this concept not only within clinical training but also as a means for dismantling the institutional structures that create and reinforce health inequities. Reflexivity can be a new and daunting topic for health professions educators, but is crucial for developing clinicians who can deliver effective, socially-just and equitable care.

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