Educators’ strategies for engaging diverse students in undergraduate nursing education programs: a scoping review protocol

Damilola Iduye1,2, Adele Vukic2,3, Ingrid Waldron1, Sheri Price1, Catherine Sheffer1, Shelley McKibbon2,4, Rachel Dorey5, Ziwa Yu2

1School of Nursing, Faculty of Health, Dalhousie University, Halifax, NS, Canada, 2Aligning Health Needs and Evidence for Transformative Change (AHNET-C): A JBI Centre of Excellence, Dalhousie University, Halifax, NS, Canada, 3Retired assistant professor, School of Nursing, Faculty of Health, Dalhousie University, Halifax, NS, Canada, 4W.K. Kellogg Health Sciences Library, Dalhousie University, Halifax, NS, Canada, and 5Nova Scotia Health Authority, Halifax, NS, Canada

ABSTRACT

Objective: The objective of this scoping review is to identify and chart teaching strategies that educators use in classroom settings to engage diverse students in undergraduate nursing education programs.

Introduction: Student engagement is critical to facilitating academic success and significant learning experiences for undergraduate nursing students. However, students from diverse backgrounds face challenges in undergraduate nursing programs, and these challenges impact their academic engagement and sense of belonging and inclusion. Creating conditions in nursing education that foster engagement by meeting the learning needs of diverse learners could facilitate their success, which ultimately might strengthen the nursing workforce diversity.

Inclusion criteria: This review will consider papers on how educators engage undergraduate nursing students from diverse backgrounds in classroom settings, including online, face-to-face, and blended formats, irrespective of the country. Evidence obtained from all sources including qualitative, quantitative, and mixed methods studies, systematic reviews, as well as gray literature will be considered for inclusion.

Methods: JBI methodology for scoping reviews, which includes a three-step search strategy, will be employed. First, keywords will be identified from relevant articles in CINAHL and ERIC. Second, another search using the identified keywords and index terms across select databases will be conducted. Third, the reference lists of all identified articles will be screened for additional papers. Titles and abstracts will be screened by two independent reviewers, and then followed by the full text review of included articles against the inclusion criteria by two independent reviewers. Data will be extracted from included articles and the findings will be presented in tables, figures, and narratively as appropriate.

Scoping review protocol registration: Open Science Framework https://osf.io/7bv5p/

Keywords: diversity; nursing education; student engagement; teaching; undergraduate


Introduction

The world is becoming progressively diverse and the result is an increasing patient population with diverse health needs.1 To meet patients’ health needs, having a health workforce that is reflective of the diversity of the population is crucial.2 Concerns about health care systems’ capacity to meet the workforce demands have resulted in increased attention to the recruitment and retention of nursing students from diverse backgrounds in relation to race, ethnicity, culture, gender, and other social identities such as language and (dis)abilities.3,4 However, diverse students often experience discrimination from peers and faculty in the classroom, resulting in adverse academic outcomes, including disengagement from educational experiences and a feeling of lack of belonging in the nursing programs.5 To ensure that current nursing programs meet the workforce demands, educators and administrators
must promote inclusive classroom environments in recognition of students’ diversity by implementing responsive teaching strategies to facilitate learning.\textsuperscript{6-7} Appreciating diversity and fostering inclusivity can improve the academic outcomes of students from diverse backgrounds.

Generally, engagement is described as “how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and to each other.”\textsuperscript{8(p.38)} Engagement encompasses the amount of time and effort students put into their studies and other educationally purposeful activities, as well as how the institution deploys its resources and organizes the curriculum and other learning opportunities to enable students to participate in activities that lead to significant learning experiences.\textsuperscript{9} There is growing evidence on the use and effectiveness of engagement strategies for facilitating learning among nursing students and on the experiences of students with such strategies.\textsuperscript{10-15} In a mixed methods study on nursing students’ engagement and academic performance using a flipped class, Busebaia and John\textsuperscript{15} reported that a flipped class increased student engagement in the course and the students were more stimulated to become active in their learning. Furthermore, the authors found that the use of flipped classrooms as an engagement tool resulted in better learning outcomes and student retention of knowledge and reflective practice.\textsuperscript{13} In another study, Massey \textit{et al.}\textsuperscript{12} found that teaching strategies, such as online discussion boards, can enhance interactions between educators and students, and these interactions can improve learner engagement. Although the available evidence provides insights into how nursing students are engaged, a gap exists in relation to considerations for the engagement of students with diverse social identities. One key indicator for student engagement is faculty presence,\textsuperscript{12} and as Harper and Quaye\textsuperscript{16} suggest, a dependency on the sameness of teaching approaches for all students is no longer appropriate given the increasing diversity of the student population. Therefore, educators must be attuned to the learning needs of diverse students and be responsive in their teaching approaches to facilitate their engagement, which, consequently, can promote their academic outcomes.

Diverse students’ disengagement as a result of discrimination by peers and faculty is well documented in the literature.\textsuperscript{5,17,18} In a narrative inquiry into the educational experiences of seven American nurses of color, aged 20 to 70 years, during their life journey, Ackerman-Barger and Hummel\textsuperscript{17} found that racism and exclusion marred participants’ experiences of an inclusive learning environment during their studies. The participants in that study described instructors’ lack of recognition of their existence as individuals in a White-dominated learning environment and how humiliating and belittling treatment by both instructors and fellow students impacted their willingness to participate in the classroom and voice their concerns.\textsuperscript{17} The findings of that study are also supported by Dapremont’s\textsuperscript{18} study on the lived experiences of 18 Black undergraduate students in the United States. The author found that students’ learning and confidence were shaped by the participants’ interactions with peers, family, and faculty,\textsuperscript{18} and feeling ignored by faculty in the classroom resulted in disengagement. One of the participants recounted an observation he made in relation to a Black male colleague:

\begin{quote}
\textit{\ldots I mean they just didn’t like this man… He would like [sic] raise his hand to answer a question… and he would have his hand raised 5 or 10 minutes, and he would just be like “forget it”. And someone else would raise their hand and they [instructors] would just call right on them.}\textsuperscript{18(p.258–259)}
\end{quote}

The above statement illuminates how an educator’s attitude to diverse students could impact their engagement, hence the significance of charting educators’ teaching strategies in the classroom. As highlighted by Kuh \textit{et al.},\textsuperscript{19} in the absence of the understanding of engagement strategies used for different student populations, it is impossible to fully comprehend the meaning of students’ experiences and the effectiveness of pedagogical approaches. Therefore, to foster inclusivity and enhance the academic outcomes of diverse undergraduate nursing students, understanding what teaching strategies educators use in promoting diverse students’ engagement in the classroom is imperative.

A preliminary search of PROSPERO, \textit{JBI Evidence Synthesis}, the Cochrane Library, CINAHL, PsycINFO, and MEDLINE revealed no systematic or scoping reviews on how nursing educators engage diverse students. However, the authors found one scoping review on inclusivity in baccalaureate nursing education.\textsuperscript{5} Metzer \textit{et al.}\textsuperscript{5} capture the experiences
of diverse students in nursing, who were referred to as students from under-represented minority groups (UMG), in their scoping review findings. The first theme demonstrated that nursing students from diverse backgrounds experience discrimination, ranging from subtle to overt, from peers, faculty, and clinicians in the classroom, clinical, and broader institutional and community settings. The second theme highlighted that the cumulative effect of discrimination on students from UMG is a lack of belongingness. The authors further pointed out that the lack of belongingness of students from UMG is consequently associated with adverse outcomes, including disengagement from all aspects of educational experience, loss of self, negative perceptions of inclusion and diversity at the institution, and the failure of institutions in learning to attract and retain students from diverse backgrounds. The third theme revealed that all aspects of the undergraduate nursing students’ learning community, including student peers, faculty, and the broader institutional culture, act as facilitators and barriers to inclusivity or a sense of belongingness. A key finding was that discriminatory behaviors by faculty or failure to intervene when diverse students face discrimination from others can impact students’ sense of belongingness and, consequently, result in adverse educational outcomes. Although this scoping review provides insights into the impact of the educators’ discriminatory attitudes on disengagement, understanding how educators positively engage diverse students is needed to facilitate their learning. To promote classroom inclusivity, the authors suggested that educators should incorporate targeted pedagogical strategies and be intentional in developing and implementing teaching strategies that will motivate diverse students and facilitate their engagement and active participation in all aspects of learning.

As the authors have not identified systematic reviews examining engagement strategies educators use in facilitating learning of diverse undergraduate nursing students, there is a need to chart available evidence regarding such strategies to inform pedagogy, educational policy, and any need for further research. Therefore, the objective of this scoping review is to identify and chart strategies that educators use to engage diverse students in classroom settings in undergraduate nursing education programs. The authors anticipate that a comprehensive charting of engagement strategies could provide insights into creating significant learning experiences needed for successful academic outcomes and future careers in nursing for all students, irrespective of their social identity.

Review question
What engagement strategies do educators use in classroom settings to facilitate teaching and learning of diverse students in undergraduate nursing programs?

Inclusion criteria
Participants
This review will consider studies that include diverse nursing students enrolled in undergraduate nursing programs. Broadly, diversity in relation to nursing education refers to “a range of individual, population, social characteristics, including but not limited to age; sex; ethnicity; sexual orientation; geographic locations; national origin; immigrant and refugee status; language; physical, and functional, and learning abilities; religious beliefs; and socio-economic status.” However, nursing recruitment efforts have been targeted to specific populations such as Indigenous and Black minority students. Therefore, social identities based on race, ethnicity, culture, gender, age, and language are considered in the context of this review. Papers that focus on educators in undergraduate nursing programs and that address engagement strategies for diverse students from the perspectives of educators, learners, and institutions will be included. In addition, all relevant papers that are focused on engagement strategies for diverse nursing students will be considered irrespective of whether they have student participants or not.

Concept
The concept that will be examined in this scoping review is intentional teaching strategies that are used to engage diverse nursing students in classroom settings of undergraduate nursing education programs. The elements of teaching strategies to be examined in this scoping review include, but are not limited to, how and at what level they were implemented (such as individual courses, across the faculty, or institution-wide). A body of literature exists on the need to foster inclusivity in the classroom to engage diverse students. Inclusivity in the context of this scoping review refers to the intentional incorporation of teaching strategies and
practices that foster a sense of belonging by promoting meaningful interactions among diverse nursing student populations and educators in a classroom setting.

5 Some examples of intentional engagement strategies for creating inclusive classrooms for diverse students include learning student names, organizing diverse study groups, and modifying case studies and other learning materials to be responsive to the needs of diverse students. In addition, evidence suggests that employing a mentoring style of advising by recruiting minority faculty members can enrich diverse students’ experiences in the classroom, thereby, promoting their engagement.

5

Context
This review will consider papers that report engagement strategies used by nurse educators in classroom settings in undergraduate programs where students are expected to obtain a registered nurse designation post-graduation, irrespective of the country of origin. The classroom includes face-to-face and online settings, as well as the combination of both settings in blended learning formats. Papers that report engagement strategies used in clinical and simulation laboratory settings will be excluded.

Types of sources
This scoping review will consider quantitative, qualitative, and mixed methods studies that explore educators’ strategies for engaging diverse students in undergraduate nursing programs. Quantitative study designs including randomized controlled trials, non-randomized controlled trials, before and after studies, and interrupted time-series studies will be included. In addition, analytical observational studies including prospective and retrospective cohort studies, case-control studies, and analytical cross-sectional studies will be considered for inclusion. This review will also consider descriptive observational study designs, including case series, individual case reports, and descriptive cross-sectional studies for inclusion. Qualitative study designs with a focus on descriptive, interpretive, and critical paradigms will be considered. Mixed methods designs that have quantitative and qualitative components will also be considered. In addition, gray literature, systematic reviews, text and opinion papers, and documents from relevant websites that meet the inclusion criteria will be considered. Papers published in languages other than English will be excluded after failed attempts to seek translated copies from the authors or transcription services. All excluded non-English-language papers will be recorded and noted in the scoping review, as necessary.

Methods
The proposed scoping review will be conducted in accordance with JBI methodology.

Search strategy
The search strategy aims to find both published and unpublished literature and will follow the three-step process recommended by the JBI. The first step involving a limited search of MEDLINE (PubMed) and CINAHL (EBSCO) will be undertaken followed by an analysis of the text words contained in the title and abstract, and of the index terms used to describe articles. This step will inform the development of a search strategy that will be tailored for each information source. The second step will involve the search of the identified keywords, and index terms across other databases. In the third step, the reference lists of all identified reports and articles will be screened for additional papers. If necessary, authors of identified papers will be contacted to obtain additional information. To capture how nursing educators have engaged diverse students over time, all studies since the inception of the included databases will be included. Removing date range parameters will enable the authors to include all studies related to educators’ strategies that engage diverse students in undergraduate nursing programs.

The databases to be searched for published literature include CINAHL (EBSCO), MEDLINE (PubMed), ERIC (EBSCO), Scopus (Elsevier), PsycINFO (EBSCO), Embase, and Academic Search Premier. The search for gray literature includes ProQuest Dissertations and Theses Databases, OpenGrey (System for Information on Grey Literature in Europe), Sigma Repository, Google (with advanced search strategies), and other relevant nursing organization websites. A sample search strategy for CINAHL database is included as Appendix I.

Study selection
Following the search, all identified citations will be collated and uploaded into Covidence (Veritas Health Innovation, Melbourne, Australia) and duplicates will be removed. Two independent reviewers will
then screen the titles and abstracts in Covidence for assessment against the inclusion criteria for the review. Papers that meet the inclusion criteria will be retrieved in full and their details imported into the JBI System for the Unified Management, Assessment and Review of Information (JBI SUMARI; JBI, Adelaide, Australia) for full-text review. The full text of selected papers will be retrieved and assessed in detail against the inclusion criteria by two independent reviewers. Full text papers that do not meet the inclusion criteria will be excluded, and reasons for exclusion will be recorded and reported in the final scoping review report. Any disagreements that arise between the two independent reviewers will be resolved through discussion or with a third reviewer. The results of the search will be reported in full in the final report and presented in a Preferred Reporting Items for Systematic Reviews and Meta-analyses Extension for Scoping Reviews (PRISMA-Scr) flow diagram. It is important to note that the quality appraisal of included studies will not be conducted as this is not required for a scoping review.

Data extraction
Data will be extracted from included articles by two independent reviewers using a JBI data extraction tool modified by the reviewers (see Appendix II). The data extracted will include specific details about the population, concept, context, study methods, the social identity of diverse students identified, identified engagement strategies, and key findings of significance to review question. Two reviewers will complete extractions from four retrieved papers and compare results for pilot testing of the data extraction tool. The draft data extraction tool will be modified and revised as necessary throughout the process of extracting data from the included papers, and modifications will be detailed in the full scoping review report. Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer. Authors of papers will be contacted to request missing or additional data, where required.

Data presentation
The extracted data will be presented in diagrammatic or tabular form in a manner that aligns with the objective of this scoping review. The table will report on the following: distribution of sources of evidence by year of publication, country of origin, objective, study design, setting, participants, the social identity of diverse students identified, engagement strategies identified, and key findings that relate to the scoping review objective. A narrative summary will accompany the tabular and/or charted results to describe how the results relate to the review question and identify gaps in the literature.

References
Appendix I: Search strategy

CINAHL (EBSCO)
Search was conducted on May 1, 2020

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<td>(MH “Students, Nursing, Baccalaureate+”)</td>
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<td>S3</td>
<td>(nurs* N1 (student* OR undergraduate OR baccalaureate)) OR (divers* N3 nurs* N3 (student* OR learner*))</td>
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<td>(learner* OR student* OR emotional OR cognitive) N2 engagement</td>
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</tr>
<tr>
<td>S6</td>
<td>(learner* OR student*) N3 (motivat* OR attention OR focus* OR (tun* W1 in))</td>
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Appendix II: Modified data extraction instrument

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<tr>
<td>Participants (eg, age, gender, level of study)</td>
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<tr>
<td>Details/results extracted from paper (in relation to the concept of the scoping review)</td>
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<td>Engagement strategies identified (eg, creating a supportive learning environment, use of peer mentors)</td>
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<td>Social identity of diverse students identified</td>
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