Proposing Problem-Based Learning as an Effective Pedagogical Technique for Social Work Education

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Abstract—Social work education is competency based in nature. There is an expectation that graduates of social work programs throughout the world are to be prepared to practice at a level of competence, which is beneficial to both the well-being of individuals and community. Experiential learning is one way to prepare students for competent practice. The use of Problem-Based Learning (PBL) is a form experiential education that has been successful in a number of disciplines to bridge the gap between the theoretical concepts in the classroom to the real world. PBL aligns with the constructivist theoretical approach to learning, which emphasizes the integration of new knowledge with the beliefs students already hold. In addition, the basic tenants of PBL correspond well with the practice behaviors associated with social work practice including multi-disciplinary collaboration and critical thinking. This paper makes an argument for utilizing PBL in social work education.

Keywords—Constructivist theoretical approach, experiential learning, pedagogy, problem-based learning, social work education.

I. INTRODUCTION

THE recent emphasis on outcomes and competency development in social work education reflects high expectations for student learning. When considering Bloom's Cognitive Taxonomy in the light of competency development, the Council on Social Work Education (CSWE) expects students to not only apply the material learned in class, but also to analyze, synthesize, and evaluate the material in light of the context presented. With this expectation, professors of social work have a need to employ teaching methods, which engage students in the higher levels of learning represented in Bloom's Cognitive Taxonomy. Royse [26] suggests that experiential education is one way to accomplish this goal. Royse uses learning to ride a bike as an example. One learns by actually doing it – not by just reading and hearing lectures about it. Additionally, it is widely accepted that once you learn to ride a bike, you will always know how. PBL is one form of experiential education, utilized in various academic disciplines to aid in students developing a deeper understanding of course material [7]. PBL is an effective method to aid social work students in competency development.

II. THEORETICAL APPROACH

Most agree that PBL is consistent with the constructivist theoretical approach to learning [15], [28]. Professors with a constructivist approach value the life experiences and existing knowledge students bring to the classroom [14], [16], [34]. They aid students in the incorporation of the new concepts

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they are learning with what they already believe to be true [22], [29], which is consistent with Piaget's equilibration of cognitive structures [24]. Piaget proposed that learning was a dynamic process in which one integrates new information with the knowledge one already possesses. The utilization of PBL in the classroom creates an experiential learning milieu for this integration to occur. This, in turn, provides students with the opportunity for the critical evaluation of their current beliefs in light of the new information they are gaining within the context of a real life situation, which often leads to a construction of a practice schema based in critical thought and not merely anecdotal [17], [32].

In addition to a purely constructivist learning approach, PBL is congruent with a social constructivist theoretical perspective [35]. PBL incorporates peer collaboration in the learning process. Students often see a problem in a particular way when considering it independently. When professors add peer collaboration to the mix, students report understanding a problem in a different light than when they considered it on their own. One benefit of collaboration is the broadening of student perspectives because of the consideration different viewpoints [2]. PBL incorporates the teacher as a mentor to aid in an even deeper understanding of the material, which is another aspect of the social constructivist theoretical perspective [8], [13], [39].

III. DEFINITION AND GOALS

Most agree that PBL is experiential in nature and aids in the development of critical thinking skills. Some schools such as McMaster and Mercer are known for purely using PBL in the academic medical setting. Savery [27] defines PBL as "an instructional [and curricular] learner-centered approach that empowers learners to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a defined problem" [28, p. 12]. For PBL to be truly effective particular components need to be present such as the educator playing the role of a facilitator, tutor, or mentor, the problem is to be ill-defined and real-world, and students work collaborative in group settings [7], [33]. "The goals of PBL include helping students develop 1) flexible knowledge, 2) effective problem-solving skills, 3) self-directed learning, 4) effective collaboration skills, and 5) intrinsic motivation" [12]. PBL places an emphasis on developing cross-disciplinary knowledge in order to develop a well-rounded solution to the problem. There is no one correct answer to the dilemma posed and students are to research the problem from a variety of angles.

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IV. Historical Context

Medical professors have guided students through the learning process using PBL for over 40 years. McMaster University in Toronto, Canada opened its baccalaureate level medical school in 1969 using PBL as its primary pedagogical technique [23]. PBL eventually infiltrated medical curriculum in the U.S.; the University of New Mexico began using a community-oriented PBL approach in 1979 [20]. Around the same time, Dr. Richard Barry left McMaster University and joined the faculty at Mercer University School of Medicine [5]. Dr. Barry brought PBL to Mercer, where professors continue to utilize this learning approach. Since the 1970's, PBL has infiltrated American education from elementary school through higher education [40]. Donner and Bickely [6] correctly predicted PBL's transcendence into disciplines other than medicine.

The literature describes PBL's utilization in nursing, business, and engineering schools. Undergraduate nursing students in Sweden participated in PBL with their preceptors serving as their guide through supervision [9]. Both the preceptors and students reported positive feelings about the experience, but the preceptors acknowledged that it was difficult to find time to provide the supervisory component. Rideout [25] recommends the use of PBL in nursing education and provides a guidebook for implementing the practice. Brozovic and Matz [3] provided business students with an opportunity to form collaborative groups and compete to develop a solution to an actual problem faced by a Fortune 500 company. They reported positive outcomes for both the students and the company involved. Mills and Treagust [21] addressed the need for more experiential approaches to engineering education to meet current accreditation standards. They reviewed several programs that utilized project based learning and/or PBL and found that project based was easier for professors to implement in the engineering classroom. Engineering professors are more familiar with projects than analyzing a problem.

V. Criticisms of PBL

Some proponents of PBL are purists and do not acknowledge the value of any other teaching methodologies. Woo and Laxman [38] are extremely critical of this approach. They believe the use of other pedagogical techniques coupled with PBL may be more effective than PBL alone. Whitcombe [36] expresses concern about the broad view of education that PBL provides and the need for specialist knowledge in contemporary society. He reports that although PBL aids in the development of overall problem solving and team working, it does not provide the opportunity for students to learn specific content for specialized fields of healthcare.

VI. PBL in Social Work Education

When searching the literature for PBL in social work, one's findings are sparse. There is limited documentation of effective use of this methodology in the field of social work. McMay et al. [19] argue that social work courses have an inherent environment already conducive to the use of PBL. Since social work looks for ways to better society and reduce social problems, discussion of ill-defined problems is already part of the educational process. Moving from discussion to "real world" problem solving seems to be a logical step for social work education. This does occur in field education. However, students may feel more prepared for field education if they had more "practice" using PBL in the classroom setting.

Altshuler and Bosch [1] reported on a pilot project implementing PBL into an MSW curriculum. The students indicated increased learning on the topic and reported positive feelings about the teaching methodology. They indicated they found PBL to be an invigorating approach to learning.

Coleman et al. [4] utilized PBL at a Canadian university with undergraduate social work students in practice with families' classes. They reported a number of positive outcomes including students' enthusiasm and retention of the information. Coleman et al. [4] reported that some students struggled with the change in classroom structure and seemed to feel insecure in their new roles as problem solvers. They emphasized the importance of preparing students for PBL through readings and discussion prior to utilizing it in the classroom.

Lam [18] discusses the use of PBL at the University of Hong Kong in social work education. Lam suggests that the use of PBL prepares students to respond to an ever-changing social environment. Her findings suggest that the use of PBL supported growth in competency in the area of the integration of multiple sources of knowledge, collaboration with peers/colleagues, and engaging in self-directed learning and goal setting, which helps prepare students for career-long learning.

Williamson and Chang [37] describe the use of a modified version of PBL with undergraduate social work students. The purpose was to bridge the gap for the students between book knowledge and the real world by aiding the students in developing thinking skills reflective of a professional social worker. However, their findings were inconclusive, as the students did not improve in their level of professional thinking to the degree expected.

Strand et al. [30] reported on the findings of an MSW elective course developed for the advanced-year, which combined PBL with trauma theory. There were seven sections of the course offered in four different universities. The results indicated increased student confidence in practicing with children and adolescents, who experienced trauma, and their families. Since this was a new course offering, there was no control group, so it is difficult to say if the results were due to the teaching methodology.

VII. Proposal for Social Work Education

Based on the success of this teaching methodology in other fields and the positive social work student responses, PBL can increase student competency in various areas of social work practice. PBL could be a significant component of a class. However, it would not be the only pedagogical technique

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utilized. The class would meet twice a week. During the first class of the week, the professor would serve as a traditional professor conveying information such as theoretical components, researched-informed practice methods, and practice techniques. During the second class of the week, the professor would serve in the PBL classroom as a tutor/mentor. The professor assigns students to small groups enhancing collaborative efforts and provides ill-defined case scenarios in need of problem solving. The professor than observes the group dynamics making comments or asking questions.

When considering Gedvilienė and Staniulevičienė's [11] five models of PBL, the fifth model, which focuses on students' ability to critically analyze and suggest solutions for a multi-dimensional problem, aligns best with the goal of competency development in social work education. This model emphasizes the need for contextual understanding of the multi-dimensional problem. Students will draw from various resources to gain an understanding of the complexities involved in the scenario. This would aid in the development of competency in the area of critical thinking focusing on the practice behavior of distinguishing, appraising, and integrating multiple sources of knowledge. Since social work students learn practice skills in the classroom and have a field experience where they actually employ these skills in real world situations, expectations include students' ability to understand the complexities that are inherent in social problems. Students are expected to engage in critical discussion in their respective groups, including challenging and questioning one another. This form of critical debate aids in forming a well-rounded comprehensive perception of the problem. Additionally, it aids in the development of the practice behavior - demonstrating effective oral communication skills with individuals, groups, and colleagues. The group component of PBL aids in the development of the practice behavior of collaboration with colleagues.

Students in Gedvilienė and Staniulevičienė's [11] fifth model of PBL engage the professor in dialogue around their scenarios. The professor comments on the process of the collaboration and the observations of the students. The professor also engages students by asking questions and encouraging them to consider different aspects of the problem that may have gone unnoticed such as cultural aspects or traditions. The professor's comments and questions intend to bring aspects of the case to light or to encourage a deeper level of thinking about a characteristic of the case. This level of understanding that includes culture, context, and traditions among other things prepares students for professional social work in a way that a lecture or video could not. Students participate in PBL and are not able to be passive learners when each group member is held accountable for their contributions to the process. Placing students in a classroom environment in which they consider real world problems will prepare them for success in both their field placement and their professional lives.

VIII. Assessment

Gedvilienė and Staniulevičienė [11] acknowledge that the assessment process is complicated when considering this fifth model. They stress the importance of the need to adapt assessment to the particular goal of each PBL exercise. They also report the results of assessment are often inconclusive. However, in social work education, assessment of students' competency is crucial to accreditation. There are various mechanisms utilized to determine the level of student competency. One of these instruments is the field instructor's evaluation component of the Social Work Education Assessment Project [31]. Field instructors evaluate the level of student competency on each of the practice behaviors on a Likert scale of 1 to 9. When conducting research, one could compare the field instructor's evaluations at a particular school for a group of students not exposed to the PBL teaching methodology with those that were to see if there were any significant differences in the outcomes.

Additional forms of assessment directly related to PBL, could be the use of rubrics, peer evaluations, and reflective journals. Professors could develop rubrics to assess reports submitted by students at the end of each assignment. These rubrics would be practice behavior specific. Peer evaluations could measure the degree of collaboration and participation from each group member. Reflective journals would give an indication of student understanding of the complexities of the problem as well as their cognition of the theoretical components.

IX. Conclusion

When considering the literature, PBL is an effective pedagogical technique in professional education. It provides opportunities for students to gain skills in critical thinking, professional development, communication, and collaboration. Frambach et al. [10] encourages educators to consider carefully the implementation of PBL in various international settings. They suggest that it can be effective if implemented with cultural aspects in mind or ineffective if culture is not considered. When contemplating Whitcombe's [36] concerns in the context of social work education, it gives one pause in specialized areas of practice. For instance, in MSW education, some students are concentrating on clinical, school, medical, global, and other specific areas of social work. In these situations, one must consider if PBL would provide the outcomes needed to practice in the specific arena of social work. Additionally, Woo and Laxman [38] have a concern regarding those, who use only a PBL approach to education.

Considering these things, the literature does support the use of PBL when considering generalist social work. PBL combined with other teaching methodologies is a viable option for social work education at the baccalaureate level as well as at the advanced generalist level. There is an implication for more research in specialized areas of social work education. It is important to consider culture when implementing PBL in various places in the world.

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