Professional Identity Formation Through Experiential Learning in Premedical Education: A Qualitative Study

Rachid Bendriss¹, Reya Saliba²

¹Department of Premedical Education, Weill Cornell Medicine-Qatar, rbendriss@gmail.com; rab2029@qatar-med.cornell.edu
²Distributed eLibrary, Weill Cornell Medicine-Qatar, reyasaliba@gmail.com; res2024@qatar-med.cornell.edu

1 Abstract

To introduce premedical students to the medical profession, a semester-long project was designed and implemented to promote experiential learning (EL) among native Arabic speaking students enrolled in an English for Academic Purposes (EAP) course at a branch campus of an American medical college in Qatar. The project aimed at providing future medical students with the knowledge, skills, and abilities to gain an understanding and appreciation of healthcare professions and to begin constructing a professional identity early.

Developed by Carl Rogers in the late 1960s, Experiential Learning (EL) theory is based on a social learning theory in which learners develop their experience and knowledge when they are involved in activities that stimulate their cognitive and affective domains of learning (Hedin, 2010). Kolb (Dunn, 2002) described the four stages of EL as follows:

- concrete experience: students gain hands-on experience
- observation and reflection: students get the chance to reflect on their experience
- abstract conceptualization: students are able to draw conclusions from their learning experience
- active experimentation: students get the chance to apply what they learned (see Fig. 1).

Fig. 1. The four stages of EL based on Kolb’s theory as represented by McLeod (2010).
When implemented in the curriculum, EL can increase student motivation by engaging students in physician shadowing activities and doctor-patient observations, which also play a vital role in developing students’ professional identity early on in their academic journey. Lin et al. (2017) suggest including real-world healthcare scenarios as early on as possible in the medical curriculum to allow “incremental curricular transformation that is training physicians of the future” (p. 180). Although an extensive body of research studies has investigated the integration of EL in medical education, research has not approached EL in undergraduate medical education for Arab students at transnational American medical colleges.

Through EL, undergraduate medical students can expand their knowledge by learning about health conditions through observation and inquiry in real-life settings. They can engage in discussions with healthcare professionals and other peers and improve their communication skills (Stepien & Baernstein, 2006). Furthermore, students can understand the dynamics among healthcare teams and appreciate the interactions between doctors and patients (Koponen, Pyörälä, & Isotalus, 2012). Finally, they develop a compassionate attitude towards medicine and appreciate the art of healing (Goldstein et al. 2014). Yet, the formation of a professional identity for Arab undergraduate medical students through EL remains an unexamined area. Thus, this study contributes to scholarship by filling a gap in the area of experiential learning in transnational medical education by answering the following research question: What are the effects of EL on professional identity formation of first-year Arab college students enrolled in a premedical course in a branch campus of an American medical college in Qatar?

A case study methodology is usually used to provide a description of a unique context and investigate how and why a particular event has occurred (Anderson, 1993; Patton, 1987). The special context in which this study took place, the relatively limited number of participants, and the specific aspect of EL this study is investigating requires the use of a case study approach “to portray, analyse and interpret” (Cohen et al., 2018, p. 188) the issue under investigation. The study uses a purposive sample of 16 students enrolled in the EAP course and who participated in the eight-week EL project that took place in the Spring semester of 2019. Three data collection methods were used:

- a questionnaire survey asking students about their goals and expectations from this experience;
- students’ weekly guided reflection entries using a learning management system;
- students’ final project consisting of posters that included a mini literature review.

The collected data underwent a thematic analysis to extract the most recurring themes from students’ survey, reflections, and posters.

A survey was conducted prior to the start of the EL visits to gauge students’ goals that they wished to achieve at the end of their learning experience. The survey also asked participants to list skills or behaviors they hoped to build as well as their expectations and feelings embarking on their first experiential learning activity as premedical students keen on forming their professional identity. Using a thematic analysis, results from the survey yielded the following perspectives (see Table 1).
Table 1. Themes extracted from students’ responses to the survey before the EL experience.

<table>
<thead>
<tr>
<th>Survey Themes</th>
<th>Sample of keywords used by students to indicate their goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork</td>
<td>Gain stronger interpersonal skills, social skills, communication &amp; interaction,</td>
</tr>
<tr>
<td>Professionalism</td>
<td>Time management, doctor-patient relationship</td>
</tr>
<tr>
<td>Empathy</td>
<td>Compassion, cultural competence</td>
</tr>
<tr>
<td>Leadership</td>
<td>Independence, confidence, patience</td>
</tr>
<tr>
<td>Motivation</td>
<td>Re-ignite my motivation and desire to become a doctor, learning medical jargon</td>
</tr>
</tbody>
</table>

Results were analyzed in light of the theoretical framework derived from the three first stages of EL by Kolb (Dunn, 2010): concrete experience, reflective observation, and abstract conceptualization. First, regarding concrete experience, prior to each weekly EL session, one to two reading materials were shared with the students, which guided them through their visits and provided them with some practical information they needed for their engagement. During their EL visits, students were divided into small groups facilitated by healthcare professionals who guided them throughout the day, providing a clear explanation of the observed process or unit. Second, concerning reflective observation, after every EL visit, students were prompted to complete a guided reflection on their experience. Results from their reflections were analyzed using a thematic approach and overarching themes were extracted (see Table 2).

Table 2. Overarching themes extracted from students’ weekly guided reflections and posters.

<table>
<thead>
<tr>
<th>Extracted Themes</th>
<th>Sample of keywords used by students to refer to the extracted themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork</td>
<td>Diversity in team, multinational team, chemistry in team, uniform, interprofessional relations, multidisciplinary team, interpersonal skills</td>
</tr>
<tr>
<td>Professionalism</td>
<td>Sense of responsibility, honesty, patient-care first</td>
</tr>
<tr>
<td>Empathy</td>
<td>Comforting patients, patient-doctor relationship, trust, build a strong bond, emotional intelligence, friendly, compassionate, complexity of empathy</td>
</tr>
</tbody>
</table>
Leadership
Transformational leader, confidence, assertiveness, characteristics of leadership

Barriers to Healthcare
Communication barriers, language barriers, doctor-patient communication, knowledge sharing

The third stage of abstract conceptualization involved students having a choice by the end of the EL project to work individually or in pairs to create posters summarizing their experiences by focusing on one of the overarching themes they most identified with. The students were required to prepare a mini literature review that critically examined the theme of their poster and link their reflections to the literature.

Based on the analysis of students’ survey responses, written reflections, and posters, the study concluded that the EL experience has strengthened their choice of a medical career track, uncovered the attributes of effective healthcare practitioners, and deepened their understanding of the role of the human dimension in medicine through doctor-patient interactions. The EL experience has also elucidated the burden of responsibility that a medical role brings as well as the importance of communication, leadership, and teamwork in healthcare.

The research findings of this study would benefit the healthcare community by informing medical education leaders and curriculum developers on the important role of experiential learning in premedical education. The study results would also inspire educators to adopt EL as early as possible in premedical education to lay the foundation for students’ professional identity formation and foster their appreciation of critical attributes: teamwork, professionalism, empathy and leadership.

References


