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# **Advocating for More Experiential Learning Strategies in Medical School**

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## **Introduction**

When it comes to learning and teaching, there are many ways for teachers and students to maximize the amount of learning that happens in the schooling environment. The focus of this paper is the effects of experiential learning in medical education. This pedagogy is very common in many teaching strategies and is widely used, debated, and studied throughout academia. This paper will introduce experiential learning as it is seen broadly throughout all fields of study and practice, but will then specifically focus on experiential learning and its effects on medical education. Using two different types of experiential learning, community-based learning and situated learning, this paper will provide examples and advocate for the use of experiential learning in medical education today. The significance of this paper is to provide literature for the use of experiential learning in medicine and hopefully encourage educators throughout academia to turn to this method of teaching for a different approach to teaching medical students, who often have to engage with rote learning.

## **What is Experiential Learning?**

A broad, loose definition would entail any sort of real world, hands-on experience that allows students to experience the topic that they are learning about directly. This can include many things such as internships, study-abroad programs, community service, and cross-cultural studies. All of these are great examples of

different ways a student can engage with experiential learning. In an article about Nepalese medical students and their learning experiences, a definition of experiential learning is provided: “In 1984 David Kolb described a four-stage experiential learning cycle, suggesting that a combination of experience and subsequent reflection is important for ‘real’ learning” (Dhital, 2015, p. 2). These four steps include concrete experience, reflective observation, abstract conceptualism, and active experimentation (Mcleod, 2013, p. 1). Experiential learning allows the student to gain this type of knowledge or skill that would be much more difficult to obtain in the typical classroom setting. For example, one of the unique benefits of experiential learning is the ability to reflect on an experience and build upon it. When the student uses this reflection of what they have experienced, they are able to “review the real experiences in order to understand their value” (Dhital, 2015, p. 2). Once this process of reflection is completed, the student can then transform the experience and reflection into knowledge that can be used for future circumstances through observation and application. This is just one example of a benefit of this type of learning.

Other scholars have also claimed more benefits of experiential learning. “It has been argued that experiential methods are more likely than didactic methods to lead to action or change in behaviour or attitude, and to result in experimentation with alternatives and in the development of skills and strategies” (Koponen, 2012, p. 205). Koponen advocates the use of experiential learning by stating that it is possible for these methods to be more productive at developing skills and strategies. Although the present article highlights the effects of this pedagogy in medical students, experiential learning is important for all types of education and has many different applications. “Experiential education... helps students both to bridge classroom study and life in the world and to transform inert knowledge into knowledge-in-use” (Eyler, 2009, p. 1). Both of these sources mention how experiential learning can impact the way students learn and retain information in a positive way. Frequently students will tend to memorize information learned in the classroom and simply repeat it back to the teacher for a grade. This does not allow for very much long-term information retention unless the gained knowledge is being put to use frequently. However, experiential learning has a much greater effect on long-term learning that “can also lead to more powerful academic learning and help students achieve intellectual goals” (Eyler, 2009, p. 1). Again, this is another example of a positive benefit of experiential learning. Overall, this type of learning is very important to the world of academics as it provides an alternative

and frequently more effective way for students to gain real-world knowledge about their particular field.

### **Experiential Learning in Medicine**

At first glance it may be more difficult to envision what exactly students, including medical students, can learn while working in the field. Surely, communication and collaborative skills are essential and can be learned very quickly since these students will have to interact with many people on the job. Yet one term is mentioned in an article that talks about medical and nursing students' experiences in a clinical learning environment: "It consists of not only preferable skills and attitudes included in the formal curriculum, but also unintentional knowledge, often referred to in the medical education literature as the hidden curriculum" (Liljedahl, 2014, p. 766). Engaging with hidden curriculum is exactly the kind of value that can be extracted out of experiential learning. A formal definition of the hidden curriculum is given as "influences occurring within the culture of medicine that indirectly alter medical professionals' interactions, beliefs and clinical practices throughout their training" (Stanek, 2015, p 1). When further analyzing examples of the hidden curriculum, major themes such as discipline, unprofessionalism, dehumanization, role modeling, and more were recurring in this article's observations. Ideas such as those just listed are not literal, raw facts that can be taught right from the chalkboard, but are necessary and important parts of being in the medical field that will have an impact on the career of medical students. In other words, these themes and values can be learned effectively through experience and activity.

For medical students, experiential learning provides a new and alternative approach to learning that gives the best possible real world experience. In some cases, even students' attitude towards their subject changed positively, which some could argue as a sign of effective learning. Koponen's (2012) study showed that "a communication course based on experiential learning methods may have a positive effect on students' attitudes in a reasonable amount of time" (p. 8). Not only was it likely that the students of this study learned valuable information, but the learning process was also implemented in a positive way through this change in attitude.

Overall, I think that experiential learning can be essential when it comes to medical students gaining the experience that they need for when they enter into their careers as caregivers. If one student wishes to become a physician and work

with patients, it is critical that they have some sort of experiential knowledge with dealing and treating patients. For this article, I have chosen two specific types of experiential learning that “can enhance learner’s knowledge and associated abilities through a variety of activities” (Feng, 2013, p. 174): *community-based learning* and *situated learning*. These learning strategies provide different circumstances for learning but are effective for medical education. For students wishing to pursue medicine, there are many examples of current and former medical students who participated in these types of learning.

### **Community-Based Learning**

Community-based learning, like all types of experiential learning, aims to approach education from a perspective that is outside of the classroom and in the outside world. Megan Hertner (2016), in her article about community based research, states that community learning “runs against the grain of ‘metrics obsessed’ consumer model of higher education, in which ‘learning outcomes are only meaningful if they are measurable’” (p.2). In a sense, students gain a type of knowledge that is not easily measured by taking a test and getting a grade. It is based on how they interact in the environment around them, and this comes from immersing themselves in the community of their field. Community-based learning is designed to provide challenges and situations that allow students to adapt and learn. “If one can challenge anyone to change, you have had an impact on the person. Both the medical students and the CHWs (community health worker) said they experienced personal growth through their interaction with each other” (Rooyen, 2017, p.75). This personal interaction is something that community-based learning provides that a textbook cannot.

Referring back to the article about the medical students in Nepal, we can look at some of the effects of community-based learning on these students. On traveling to Nepal, these students were working as medical assistants in a rural area that had very little access to any sort of health care. This is far from the ideal medical environment that you would normally find in a hospital or clinic, and this environment can more effectively help students learn valuable skills from working in such a different context. “I realized that it is not always possible to practice everything in the community that we have learnt in our hospital. So we should be cautious about resources available and their use” (Dhital, 2015, p 5). This is one example of the extended lessons learned by this particular student while working

in the field. In the classroom, ideas are typically thrown about under theoretical ideal circumstances; for example, hypothetical questions inside a classroom. A student would not be obligated to think about what kind of a situation the doctor or patient could be in. This particular student notes how they did not have all of the necessary resources that they needed, and from that they learned that in that particular setting, one needs to be cautious about the availability of resources in order to most efficiently treat patients. One of these students reflected on how this study pushed her out of her comfort zone and allowed her to change and learn about new environments:

I was born a city girl and everything is totally different from what we are used to. This posting has certainly made me strong enough to adjust in different settings. These are not just part of the curriculum I am following, these are going to be the milestones towards my self development. (Dhital, 2015, p. 5)

It is extremely important to highlight this particular student's observation because it clearly shows how this venture into an unknown community affected her learning experience. She knows that she is getting more out of her experiences than she normally would and attributes that directly to her own self development. In this case, she feels more prepared to deal with situations that she may face in the future when practicing medicine.

An article by Sandra Carr and Dianne Carmody (2006) presents a study on the reflections of nursing students on their clinical experience. This is another instance where community-based learning takes place since the students are immersed into the world around them in order to learn, in this case the hospital. In the study, there were many recurring themes that the students reflected on, some examples being clinical reasoning skills, problem solving, communication skills, and overall knowledge. The students were able to learn skills such as "how to approach and communicate with a woman experiencing a miscarriage" (Carr & Carmody, 2006, p. 773) as well as more intellectual ideas that "may be instrumental in engaging them in the life-long learning process" (p. 773). It was from these experiences that the students were able to learn valuable skills involving personal interaction and communication that can be much more difficult to teach in a classroom setting. This particular study was able to "offer effective teaching and learning experiences for students to address the stated unit learning outcomes" (p. 773). In this setting, the

nursing students were able to experience a very close replication of what their careers would be like by participating in the hospital community setting.

### **Situated Learning**

Situated learning is a form of experiential learning that encompasses the use of alternative strategies to transmit knowledge. Like all forms of experiential learning, situated learning uses new contexts to allow students to change their way of thinking. Joe Curnow (2013) gives a definition of situated learning in his study about situated learning and conscientisation: “Situated learning theory understands learning as ‘a pervasive, embodied activity involving the acquisition, maintenance, and transformation of knowledge through processes of social interaction’” (p.826). Similar to community-based learning, situated learning frequently involves social interaction by students, and this learning strategy presents knowledge in real-life contexts.

Gillian Maudsley and Janet Strivens (1999) discussed this topic in a paragraph that is titled, “Situated Learning.” Here, medical students, “learn what to observe, what interpretations to link to observations, and what words and actions to use when conveying these both to clients and colleagues” (p. 537). This reiterates that social interaction in an environment is essential to situated learning. Not only were these students learning content, they were also learning how to interact and deal with people inside the context of their learning. This article also talks about Kolb’s work once again, stating that experiential learning is moving through the field and reflecting on the events and situations that occurred. This article also highlights one of the major reasons to advocate for situated learning, because it “challenges professional education by questioning the value of knowledge transmitted by instruction...”(Maudsley & Strivens, 1999, p 537). In order to keep improving ways of learning, one has to be able to question current strategies and advocate for new ones. Situated learning does this by giving students a new and different way to learn.

Zhu and Chiappini (2013) discuss further about situated learning and its effects outside of the classroom: “Situated learning is a type of learning embedded in activity, context, and culture” (p. 383). Like the previously discussed type of experiential learning, situated learning is important in “representing a major shift in learning theory from traditional views of learning as knowledge accumulation, toward a perspective of learning as emergent, social, and cultural” (p 383). Students

can benefit from going outside the classroom and learning by doing hands-on activities and engaging in the environments around them. This article also discusses how situated learning provides “authentic activities” (p 383). An example of such could be doctor-patient meetings in the medical field. These experiences help to provide skills necessary for one who is practicing in this field, such interactive skills and ways to effectively communicate information with patients. Essentially, students who have acquired these skills have gained valuable experience and are said to have achieved a deeper form of learning (Zhu & Chiappini, 2013, p 383).

### **Conclusion**

Experiential learning is an important pedagogical approach when it comes to finding new ways to implement teaching strategies and effectively improve students’ acquisition of knowledge. The literature presented in this article aims to support this pedagogy for all fields but particularly in the medical field through the use of community-based and situated learning strategies.

As Kolb (2005) states in his work, “To improve learning in higher education, the primary focus should be on engaging students in a process that best enhances their learning” (Kolb, 2005, p. 194). In this case for medical students, experiential learning can be an exceptional way for students to learn how to act, communicate, and perform in certain situations. By indulging in this kind of learning, whether it is community-based or situated, medical students can be overall better prepared for the careers that lie ahead of them.

One of the students that had the opportunity to study in the rural areas in Nepal from Dihtal’s (2015) article gives a direct example of what they learned in the process of working as a medical service provider in a rural area. “*Today, I could do the urinalysis using my knowledge. Now I have the confidence of doing the urinalysis when I will be posted in rural areas*” (p. 5). This student was able to perform and practice a procedure that would be difficult to simulate in a classroom, and through this experience they gained the confidence to continue performing procedures.

In many cases besides that stated previously, experiential learning can provide these necessary learning opportunities that prepare students for real-life situations. It is my hope that educators around the world will continue to pursue the use of all types of experiential learning so that students emerging into their fields are as prepared and knowledgeable as humanly possible.

## References

- Carr, S., & Carmody, D. (2006). Experiential learning in women's health: Medical student reflections. *Medical Education*, 40(8), 768-774. doi:10.1111/j.1365-2929.2006.02536.x
- Curnow, J. (2013). Fight the power: Situated learning and conscientisation in a gendered community of practice. *Gender and Education*, 25(7), 834-850. doi:10.1080/09540253.2013.845649
- Dhital, R., Subedi, M., Prasai, N., Shrestha, K., Malla, M., & Upadhyay, S. (2015). Learning from Primary Health Care Centers in Nepal: Reflective writings on experiential learning of third year Nepalese medical students. *BMC Research Notes*, 8(1). doi:10.1186/s13104-015-1727-2
- Eyler, Janet. (2015, January 05). The power of experiential education. *Liberal Education*. Retrieved November 13, 2017, from <https://www.aacu.org/publications-research/periodicals/power-experiential-education>
- Feng, J., Chang, Y., Chang, H., Erdley, W. S., Lin, C., & Chang, Y. (2013). Systematic review of effectiveness of situated e-learning on medical and nursing education. *Worldviews on Evidence-Based Nursing*, 10(3), 174-183. doi:10.1111/wvn.12005
- Hertner, M., Ried-Moroney, N., & Bell, A. (2016). *Community-based research and student learning*. Huron University, Huron, South Dakota.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193-212. doi:10.5465/amle.2005.17268566
- Koponen, J., Pyörälä, E., & Isotalus, P. (2012). Comparing three experiential learning methods and their effect on medical students' attitudes to learning communication skills. *Medical Teacher*, 34(3). doi:10.3109/0142159x.2012.642828
- Liljedahl, M., Boman, L. E., Fält, C. P., & Laksov, K. B. (2014). What students really learn: Contrasting medical and nursing students' experiences of the clinical learning environment. *Advances in Health Sciences Education*, 20(3), 765-779. doi:10.1007/s10459-014-9564-y
- Mann, K. V. (2010). Theoretical perspectives in medical education: Past experience and future possibilities. *Medical Education*, 45(1), 60-68. doi:10.1111/j.1365-2923.2010.03757.x

- Maudsley, G., & Strivens, J. (2000). Promoting professional knowledge, experiential learning and critical thinking for medical students. *Medical Education*, 34(7), 535-544. doi:10.1046/j.1365-2923.2000.00632.x
- McLeod, S. (1970, January 01). Saul McLeod. Retrieved November 13, 2017, from <https://www.simplypsychology.org/learning-kolb.html>
- Patton, K., Griffin, L. L., Sheehy, D., Arnold, R., Gallo, A. M., Pagnano, K., Dodds, P., Henninger, M. L., James, A. (2005). Chapter 2: Navigating the mentoring process in a research-based teacher development project: A situated learning perspective. *Journal of Teaching in Physical Education*, 24(4), 302-325. doi:10.1123/jtpe.24.4.302
- Rooyen, M. (2017, June). Developing capability through peer-assisted learning activities among 4th-year medical students and community health workers in community settings. University of Petoria, South Africa.
- Sand, J. N., Elison-Bowers, P., Wing, T. J., & Kendrick, L. (2014). Experiential learning and clinical education. *Academic Exchange Quarterly*, 18(4). doi:ISSN 1096-1453
- Stanek, A., Clarkin, C., Bould, M. D., Writer, H., & Doja, A. (2015). Life imitating art: Depictions of the hidden curriculum in medical television programs. *BMC Medical Education*, 15(1). doi:10.1186/s12909-015-0437-8
- Zhu, Y., & Bargiela-Chiappini, F. (2013). Balancing emic and etic: Situated learning and ethnography of communication in cross-cultural management education. *Academy of Management Learning & Education*, 12(3), 380-395. doi:10.5465/amle.2012.0221