Thinking of Learning Communities? Here Are Some of the Ways They May Benefit Your Medical Students

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ABSTRACT: Learning communities are designed to bring together students, faculty, and potentially other healthcare professionals, to learn with and from each other formally in teaching activities but also in the social domain. In recent years, learning communities have gained some recognition as an effective educational strategy but their use is still not widely seen in all medical schools. Numerous benefits of learning communities have been reported and these include improved academic performance, enhanced critical thinking and problem-solving abilities, increased student confidence, and improved communication skills. Learning communities also provide opportunities for personal growth, mentorship, and self-reflection, all of which contribute to a students' professional development.

KEYWORDS: learning, community, collaboration, support networks, clinical skills, professional development

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Introduction

Medical education has evolved beyond the traditional didactic approaches and the post-pandemic learning environment is very different. Also, some students have reported an overall more challenging experience while at medical school.[1] With this in mind, could the use of learning communities offer a solution to improve the overall experience for medical students? Having recently implemented the use of learning communities (LCs) as part of a curriculum transformation, this commentary aims to highlight the main benefits of LCs for medical students. It is hoped that it will inform those who are currently contemplating their potential use in their own programmes.

Designing Learning Communities

The transformation of our medical curriculum took an integrated and system-based approach that incorporated more case-based learning, which focused on common or important diseases of global importance. It also focused on professionalism and professional identity building, interprofessional learning and the development of clinical skills using early patient contact combined with simulation. A more student centred approach to assessment was also implemented with the introduction of programmatic assessment involving progress testing. Alongside this, the wider university experience was overhauled to reinvigorate the student-life while on campus and to create a stronger sense of belonging with the introduction of LCs.

LCs have been defined as longitudinal groups of students that aim to enhance the student experience and maximise learning.[2] Given they are longitudinal, each community should have a cohort of students from every year in the programme and students should remain there until graduation. In this model, and at the beginning of the new academic year, the year one medical students entering the programme replace the graduating cohort. LCs should be purposefully small to create a positive and effective learning environment[3] and they should also be as culturally diverse in nature and gender balanced as much as possible.[4,5] However, as each medical school is different, the number of communities, and the proportion of students in each and their diversity, will most likely be dictated by the size of the class and the demographics of the student population.

The overall aim of a LC is to improve the ability of medical students to collaborate with academics and fellow students while still supporting their individual personal and professional growth. Additionally, LCs aim to foster a culture of lifelong learning.[3,6] They therefore can be viewed as supportive networks that are characterised by collaborative and studious, yet social, environments.

Providing a support network

LCs are also viewed as being important for underpinning medical education.[6-8] However, they are not used widely outside of North America. It should also be noted that the integration of teaching staff in LCs has been shown to be equally beneficial for their professional development, particularly around improving their own clinical skills.[9] So, from a faculty perspective, it is important and essential that academics are also embedded in the LCs' structure from the outset. To ensure this important and mutualistic relationship between staff and the student was built in our own communities, we assigned personal tutors to each community. These personal tutors are mixture of pre-clinical scientist academics, as well as teacher practitioners. Personal tutors were assigned to a LC to best suit the needs of the students at the stage of their education with teacher practitioners being reserved to the

latter years when students are on more long-term clinical placements.

LCs should provide medical students with a sense of belonging and support. They should also provide students with the additional supports they may need to cope with the stresses and challenges that studying medicine can pose. By forming strong connections with peers, faculty mentors, and other professionals within a LC, it is hoped that students create a supportive network that understands their shared situation. This network can offer guidance and encouragement that ultimately enhances well-being, resilience, and good mental health.

Fostering a culture of collaboration and teamwork

LCs also foster collaboration and teamwork among medical students, promoting active engagement and shared learning. Through small group interactions in workshops and tutorials, case-based discussions, and other problem-solving activities, students can integrate knowledge, perspectives, and experiences.[10] This collaborative approach enhances critical thinking, clinical reasoning, and decision-making skills that prepares students for effective teamwork in the workplace. Preferably, these learning experiences should happen face-to-face and active participation should be encouraged by faculty as these experiences are more beneficial to students.[11] The importance of peer-assisted learning should also be considered as students benefit greatly from these collaborative experiences.[12]

Developing communication and other clinical skills

A focus on clinical skills training is common in LC structures.[2] Effective communication is vital for safe healthcare delivery, and LCs can play a crucial role in developing this important clinical skill and others. For example, early exposure to clinical skills training in LCs has been linked to improved clinical evaluations.[13] Through frequent face-to-face interactions with peers and faculty, students can refine their abilities to communicate complex medical concepts, actively listen, and empathise with patients. For example, it has been reported that workshop-based training improves a doctors' communication skills.[14] LCs, therefore, offer opportunities for practicing potentially difficult conversations and dealing with complex situations and patient encounters. One study did find a slightly improved performance in clinical competencies, such as history taking and documentation of clinical encounters, in a cohort of LC students compared to a non-LC cohort on completion of their pre-clinical curriculum. However, this was not seen on completion of clerkship evaluations so the authors recommend that more research be done to assess the true positive impact of LCs on clinical skills teaching, which highlights the need for continuous evaluation.[15]

Encouraging professional development & life-long learning

LCs encourage a holistic approach to medical education, integrating academic learning with personal and professional development. Mentorship programs, reflective discussions, and extracurricular activities enable students to explore topics such as ethics, self-care, and the other social determinants of health. This comprehensive approach equips students with a broader perspective on medicine, enhancing their understanding of the social, cultural, and ethical dimensions of healthcare. Students also appreciate the collaborative nature of these environments as they foster peer support, a shared learning, and the opportunity to develop interpersonal skills. Overall, students perceive LCs as a positive addition to their programmes with them noting a better quality of life, a greater sense of belonging, an increase in engagement and a more holistic approach to their own medical education.[6,16]

LCs, and the wider learning environment, should also instill a culture of lifelong learning in medical students. By engaging in communities that prioritise continuous education, students develop a mindset of curiosity, inquiry, and self-improvement that prepares them for post-graduate training and their future career in the workplace.[3,16,17] It is also often assumed that the training and knowledge acquired in medical training as a student, and the often unstructured practical work and teaching experience gained post-graduation in the clinical setting, is sufficient for preparing practitioners for specialist training.[18] This perhaps highlights the lack of continuity in teaching and learning approaches as students migrate from undergraduate education into further health professions education as a postgraduate. The concept of a professional LC has been reported in other health professions, such as nursing.[19] The idea is that these LCs will help retain graduates, encourage practitioners back to the profession and also prevent those considering leaving the profession altogether.[19] By familiarising students with LC constructs as an undergraduate, followed by a transition into a similar environment post-graduation, the community environment should continue to encourage those involved in further education and training to stay up-to-date with advancements in medical knowledge, technology, and research so that that they remain competent and adaptable healthcare professionals throughout their careers.

Consider the challenges carefully

While the benefits of LCs have been widely reported in the literature, their implementation does require careful consideration, as challenges do exist. For instance, establishing LCs requires careful planning, allocation of resources, and coordination among faculty, administrators, and students. Efforts must also be made to ensure LCs are inclusive with an ethos that embraces diversity, addresses potential biases and promotes equal opportunities for all students. One study noted that

students value the various components of LC structures differently, so this also needs careful consideration.[16]

As educators, we cannot expect every student to engage with their LC and environment in the same way. It is therefore essential that the student voice is heard and active student participation in the implementation of LCs is likely to be key to their success.[20] It is also essential to develop appropriate evaluation methods to assess the effectiveness and impact of LCs as this is essential for continuous improvement.[17] Formal mechanisms to obtain regular student and staff feedback for quality improvement purposes will help those already using LCs adjust to the recommendations and needs of all involved in the communities. This is also important as maintaining the long-term sustainability of LCs requires ongoing support, faculty development, and integration within the broader curriculum.[17] Despite these challenges, the overall consensus is that thoughtful design and implementation of LCs within medical curricula ultimately offers significant advantages for both students and faculty.

Conclusion

Listen to the student voice

Finally, if you are still uncertain of how LCs might benefit your own students, perhaps the volunteered feedback of one our year two undergraduate medical students on their own experience with their LC might help you decide. The student very eloquently said that being involved with their LC "*…..has been invaluable. It's where I discovered essential supports, lasting friendships and charted a course for academic achievement.*" By embracing the principles of collaborative learning, supportive networks, effective communication, holistic education, and lifelong learning, advances in medical education and the implementation of LCs will nurture a new generation of healthcare professionals prepared to meet the challenges of a rapidly evolving healthcare landscape.

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Consent and ethics

Not applicable.

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