Chapter 2.2.3

ACADEMIC SERVICE LEARNING AND RURAL MEDICAL EDUCATION

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Introduction

Academic service learning (ASL) is an approach which entails students engaging in meaningful service as an integral part of academic learning; they learn while they work and they work while they learn. As such, it is invaluable in rural medical education as it ensures that students learn from the range of experiences that rural contexts uniquely offer, while adding some personpower to the medical team.

The promotion of authentic learning is intrinsic to the practice of ASL. This is about how learning takes place and how the individual constructs new knowledge from real-life challenges which can then be used creatively in new and complex situations (1). The aim of authentic learning is to focus continuously on achieving the highest possible quality of service and quality of learning. As such it provides the methods and tools for students to be sensitive to their contexts and the people with whom they work while they deepen their own learning through action and reflection.

The particular strength of learning in a rural setting is that all the elements needed for both ASL and authentic learning are abundantly present. While rural health care and medical education therefore offers unique opportunities for ASL, these need to be explored and developed to make the best use of these opportunities.

ASL comprises five elements (2):

1. appropriate service to the community;
2. appropriate accelerated academic learning;
3. structured reflection;
4. social / civic learning; and
5. collaboration and partnerships.

While ASL can be seen as a further pedagogic development from problem-based learning (PBL) and community-based education (CBE), relevant service delivery, structured reflection and civic learning are more explicit in ASL than in CBE.

Service to the community

Being involved in actual service delivered to a community is a crucial element of ASL and is often the most important part of rural learning (3). Reciprocity is an important part of ASL, whereby the student makes an effort to serve and learn while the patient, health team and community make an effort to accommodate and support the student in their learning and in their service.

Small teams and often chronic staff shortages in rural areas mean that health workers are frequently overextended and they may experience students as an additional burden. This means that students need to be part of the service delivery team and to make a significant contribution – and staff need to be supported in finding ways of involving students as part of service delivery and quality improvement. Where students are given more responsibility in patient care, quality improvement projects (such as staff development or community outreach) provide them with a range of real life challenges. Although students should not take the final responsibility for patient care, in rural services the students' contributions are often a major contribution to care. Where sub-optimal care occurs as a result of a lack of resources in rural services, students need to be guided and supported to recognise this and to develop ways to improve the situation.

Spending a longer time in rural rotations can provide students with experiences of continuity of care and of relationships which enables them to experience the realities of patient care and service delivery in all its complexity. Follow-up of patients and projects gives the student the opportunity to experience the actual impact of interventions with the patients, families and health teams; an ideal opportunity to learn from real life. This can be maximised by linking students to specific practitioners, health care teams, patients, families and communities. These experiences, often difficult to access, or absent, in urban specialist practices, are important for authentic learning.

Academic learning

ASL is concerned with the development of authentic learning and an authentic curriculum. The exposure of students to rural health services is an important opportunity for curricula to be challenged and adapted by the realities of health and health care. With the inequities in health care often visible in rural areas, students experience health problems as they manifest in communities, where the social determinants of health are more obvious.

ASL activities in rural learning contribute to specific curricular learning. Students should have access to the learning material through resource centres and the internet so that they can integrate the standard learning material and information sources with experience and information from local sources. In addition, facilitated web-based discussions have the potential to become a major resource as access to cyberspace expands to rural areas. Distance learning methods and technology are important components of ASL and authentic learning.

As authentic learning entails a student being able to use what they have learned to solve new problems (1), it includes taking notice of the complexity which is evident in rural life and health. While special investigations in the large urban hospital allow students to learn to solve problems by an ever-increasing complexity and number of investigations - and this may even be regarded as 'high standard of care' - in rural areas students are challenged to participate in providing high quality care with limited resources and facilities. These complexities require thought and understanding – and the creation of new knowledge to solve new and complex problems.

For authentic learning to take place, the student needs self-confidence, motivation, personal effort and perseverance. Students from urban areas may lack self-confidence when they are in rural areas and may need initial encouragement and emotional support ('supported participation' as described by Dornan et al (4)). Support can lead to confidence, while a close relationship with a patient in need creates the motivation to provide high quality care. Out of this authentic experience comes the motivation to try and persevere.

Collaborative learning is part of ASL at its best (5). In rural settings, students are separated from their familiar sources of support and work and live in small groups where new relationships are created as they tackle the challenges of the 'unfamiliar other'. For many, a new camaraderie grows while for others, the challenge may be overwhelming and frightening. Students need to be prepared for this challenge and be able to ask for advice when necessary.

While collaborative learning may increase the quality of individual learning (5), this needs to be based on initial individual effort without which group work becomes secondhand rather than authentic. An astute facilitator will ensure that every student has experienced a real life issue, reflected on it and confronted its challenges before the group work begins. Only then can the learning begin by integrating the new concept into the familiar frame of reference. Once this has happened, the group gets together to share their individual experiences and their new ideas. This provides a new challenge and may assist each one to reach an even higher level of learning.

As facilitating authentic collaborative learning requires skill and courage, rural facilitators are to be supported in this practice so that they resist the temptation of providing 'secondhand' answers.

In the midst of the richness of rural learning, the rural doctor may neglect his or her own authentic development. Ideally if they follow the same process of authentic learning, these doctors will become authentic role models.

Reflection

Reflection is a crucial element of practice and learning – and ASL requires rigorous reflection. Following exposure to real life challenges, reflection is the process of re-examining one's past frame of reference. When the 'new' does not fit with the old, one of two things happens: the new is adapted and integrated into a changed framework, or it is rejected.

Rural practice provides an ideal situation for students to engage in authentic reflection and to experience its impact on understanding and on professional practice. In rural learning where the student is often more isolated and away from the main campus and lecturers, the need for reflection is more apparent.

Reflection is not only for students, however. Ideally the health service also reflects as part of their improvement and the rural education programme reflects to improve the learning of students.

Student reflection (6)

A rural rotation provides unique circumstances that promote reflection: everything is new and challenging; students travel together to and from the rural facility and they live together, work together and at the end of the day, reflect on what has happened as they prepare meals together. They are able to discuss their experiences in detail with friends who understand the challenges. This is part of authentic learning as new concepts are shared and refined. In addition web-based social networks, such as Facebook and twitter, are part of students' lives and provide an opportunity for 'uncensored' reflection and interaction. Although these are not formal activities, the learning that occurs needs to be acknowledged and encouraged.

In terms of structured forms of reflection, these can include learning journals, reviews of patient records, reflective history templates (7), activity reports, significant change stories (8) and digital story telling (9).

Digital story telling is a reflection method that works well for rural rotations (10). At the end of the block, individual students present a photo story comprising five to seven pictures taken during the block. The process of going through a series of pictures and selecting which to use and why, takes the student through a powerful process of reflection. It provides the opportunity to deal with some of the negative experiences and to have a more comprehensive view of the rural block. Students experience this as a useful way to end the rotation and take experiences with them into the rest of their studies and practice.

Rural learning programme reflection

Rural learning programmes need to reflect and adapt continuously. As rural learning is not main stream, many of the programmes are frequently assessed and reviewed – using feedback from students, patients and staff, reflections from mentors and lecturers and evaluation of student performance and learning. It is important to make this reflection explicit and visible to students and staff.

Service reflection

Health care has to be measured by not only the scope and number of services provided but also by the outcome of this care by the judicious use of indicators. In rural areas with smaller, well-circumscribed communities, this may be easier than in larger urban areas. Seeing actual change provides a special opportunity for student learning.

Quality Improvement (QI) is the process of service reflection. As rural health teams are often small and have limited resources, QI is often neglected. Students can assist rural teams through data collection and analysis, as well as implementation and review of the new approaches.

Social and civic learning

Social and civic learning are about understanding the social and health care systems in which we live and work, including social justice, inequity, agency and advocacy. The student is challenged not only to have a view, but also to make choices regarding the type of society he or she wants to be part of and what type of citizen he or she wants to be. In ASL these issues are addressed throughout, with students constantly being asked: What is going on? How do you understand it? What can be changed? What can you do about it? How does this change your understanding? And how will it change your choices and actions in future?

As inequities and poverty are often more explicit and evident in rural areas than in urban areas, rural learning provides the student with the opportunity to take action. Additional avenues for students to become active contributing members of society are provided by rural student societies and organisations.

Collaboration and partnerships

Collaboration is a crucial process within health care. In ASL the process of collaboration and partnerships with people, communities, service delivery agents and community-based organisations form the basis for involvement with communities.

The process of collaboration includes

- individual effort and commitment;
- joint knowledge creation by participants;
- respect;
- building networks with practitioners, services, patients and families; and
- information (and not power) as the currency of collaboration.

In rural learning, team work and collaboration (or its absence) is often more visible to students. Experiencing collaboration and reflecting on it will enable students to develop these skills not only in health care practice, but also as students work and live together.

Inter-professional learning, which is often more talked about than done, can be practiced through ASL. From first year to final year, students are more easily integrated in rural areas where students from a range of disciplines have the added opportunity of learning and living together. In Uganda, first year medical, nursing, dentistry and medical radiography are involved in community projects (11), while in South Africa, medical, occupational therapy and physiotherapy final year students are involved in hospital patient care. These opportunities in rural learning need to be exploited.

Conclusion

By exploring the pedagogy and practice of ASL, rural education provides possibilities of not only rich learning for students and the development of staff and services, but also an area of development of ASL.

To implement ASL, the elements need to be understood by the university staff, rural teachers and rural health workers and managers - and all the elements of ASL need to be planned and implemented in a structured manner.

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