



Use Authentic Learning Experiences in your Teaching

Khaled Almisnid, Emma Wales, Robert Whitham and Summia Zaher

Providing learners with the knowledge, skills and attitudes required for the roles they are undertaking are central pillars of medical education. By making learning experiences more authentic, the learning process becomes more relevant and engaging to the learner, increasing their preparation for the real world. In this paper we will describe the design elements of authentic learning and make suggestions on how you can bring authenticity into your teaching.

Introduction

Modern medical education strategies are ever moving away from traditional didactic teacher-centred approaches to methods that engage learners in their own education. Authentic learning experiences actively involve learners in the application of knowledge and skills to complex problems that mirror those that are faced in real-life. Relevance to the learner is essential.

As opposed to rote learning and recalling abstract information, authentic learning gives a framework to provide learners with opportunities to achieve a deeper understanding of how to apply what they learn. The teacher's role is to support and facilitate rather than act as an expert from whom knowledge is derived. The addition of social collaboration makes authentic learning an extension of experiential learning (Kolb 1984).

Whilst developing truly authentic learning experiences are challenging, the benefits to learners are immense because learners:

- are more motivated when learning is relevant to their future practice
- are better prepared to succeed
- learn to assimilate and connect knowledge that is unfamiliar
- are exposed to different settings, activities and perspectives
- transfer and apply theoretical knowledge to the world outside
- have opportunities to collaborate and to practice problem solving and professional skills
- have opportunities to exercise professional judgments in a safe environment
- practice higher-order thinking skills
- develop flexibility to work across disciplinary boundaries

Bringing authenticity into your teaching

Involvement in clinical teaching can have added benefits to patients by increasing their knowledge about their health, as well as gaining personal satisfaction from being involved (Jagsi and Lehmann 2004). However, students and trainees need adequate

supervision and training to minimise the risk of harm to patients. This refers to always acting for the benefit of patients whilst causing minimal harm.

Autonomy (self-rule)

Authenticity can be brought into teaching through a variety of activities. Here we will demonstrate how shadowing, project-based learning, and simulation-based learning can be used to bring authenticity into your teaching.

Shadowing: by shadowing a health professional and being exposed to the day to day experiences, tasks and decision making that such an individual makes, learners obtain insight into job roles, team-working, time management and organisational skills.

Case example 1

Aim: to give learners insight into a GP practice

A group of learners were assigned to different members of a GP practice; GP in surgery, practice manager, practice nurse, health visitor, home visits. Following reflection and discussion the GP practice's website was reviewed and suggestions made for improvement.

Case example 2

Aim: to give learners insight into the work of the emergency paramedic services

A small group of learners were assigned a nightshift to shadow a paramedic team and accompany them on emergency calls. These experiences were used as the basis for a poster presentation on the challenges faced in pre-hospital emergency care.

Project based learning: learners are given a problem and tasked with researching and producing a result.

Case example 1

Aim: to teach learners about sexually transmitted infections and how to relay information to patients in layman's language
Learners were tasked with creating a patient information leaflet, which were then used for display in the young people's sexual health clinic.

Case example 2

Aim: involvement of learners in quality improvement projects
Learners were tasked with improving documentation of assessment of patients who fall in hospital, resulting in the production of an evidenced based post-fall assessment tool.

Simulation-based learning: involving the learner in simulations of real life activities. Learners are actively participating in the decision making helping to develop communication, collaboration and leadership skills.

Case example:

A multi-disciplinary team of learners were faced with the emergency situation of a patient with a post-partum haemorrhage. Outcomes included improved communication and team working resulting in improved patient safety.

Summary

Authenticity can be ensured by making more formal teaching patient centred e.g. case-based learning, and ensuring its relevance to the real life situations the learners will experience. The table below shows ten ideal design considerations for an activity. However, not being able to include all of these does not necessarily mean an activity is not authentic. Realistic application of these in medical education can be seen as a spectrum which considers logistical, financial, practical and ethical elements of our teaching capabilities in a resource-limited environment.

Design elements of the authentic learning activity (Reeves et al. 2002)

Design elements of the authentic learning activity	Explanation
Real-world relevance	To be designed in a way that reflect real life challenges
Ill-defined problem	Make the activity sufficiently challenging to ensure the learners have to find their own way of interpreting and solving the exercise
Sustained investigation	The activity needs to be solved over a period of time and involves intellectual effort
Multiple sources and perspectives	Learners have to identify the resources most appropriate to their task
Collaboration	The activity needs to involve social interaction between a group of learners
Reflection	The activity requires learners to reflect on their progress throughout
Interdisciplinary perspective	Learners need to consider a wide variety of perspectives to complete the task
Integrated assessment	The activity assessment should be similar to that of the real-world
Polished products	By the end of the activity learners have to produce a valuable product
Multiple interpretations and outcomes	There is no single correct approach to the development of the end product

This paper was produced as a consequence of a group task to produce and reflect on a half day teaching event on learning in the workplace as a part requisite of the Cardiff Diploma in Medical Education.

References and further reading

Benefits of Authentic Learning. (n.d) Curtin University.
https://otl.curtin.edu.au/teaching_learning_practice/student_centred/authentic.cfm

Kolb DA. 1984. *Experiential learning: experience as the source of learning & development.* Upper Saddle River, NJ; Prentice-Hall

Lombardi, M. 2007. *Authentic Learning for the 21st Century: An Overview.* The EDUCAUSE Learning Initiative

Reeves, T. C., Herrington, J., & Oliver, R. (2002). *Authentic activities and online learning.* Annual Conference Proceedings of Higher Education Research and Development Society of Australasia. Perth, Australia. Retrieved April 27, 2016, from http://researchrepository.murdoch.edu.au/7034/1/authentic_activities_online_HERDSA_2002.pdf

Interested in learning more about this and other educational topics? Why not professionalise your role with an academic qualification at PGCert, Dip or MSc in Medical Education via e-learning or attendance courses.

Contact: medicaleducation@cardiff.ac.uk

<https://meded.walesdeanery.org/meded-courses>

Khaled Almisnid – Teaching assistant medical students, Saudi Arabia

Emma Wales – Consultant Geriatrician, Hereford

Robert Whitham – Core Surgical Trainee, Severn Deanery

Summia Zaher – Clinical lecturer in O&G, Cardiff University

Series Editor

Dr Michal Tombs – Senior Lecturer in Medical Education, Postgraduate Medical & Dental Education (PGMDE), Wales Deanery, Cardiff University.

