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Medical Education @ Cardiff

Overcome barriers to effective work-based learning

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Traditional approaches to training such as the apprenticeship model are no longer appropriate for learning in medicine. Challenges such as the recent training and healthcare reforms, which include working time directives, the centralisation of specialist services and shorter hospital stays, mean that we need to find new ways to enable trainees to learn at work (Morris, 2008). Barriers such as limited time and resources, service commitments and access to learning activities have all conspired to prevent work-based learning (WBL) from realising its full potential (Billett, 1995). Recognition of these barriers will help inform suitable solutions which will enable us to overcome the inherent difficulties.

“Learning in work-based contexts involves students having to come to terms with a dual agenda. They not only have to learn how to draw upon their formal learning and use it to interrogate workplace practices; they also have to learn how to participate within workplace activities and cultures” (Griffiths and Guile, 1999:170). WBL is defined as “learning for work, learning at work and learning through work” (Seagraves et al, 1996, p.15). A key principle is that the learning is inherent in everyday practice. In the workplace, medical students and trainees participate in authentic activities that form the foundation of their learning (Billett, 1995). These activities, e.g. taking a history from a patient, enhance the transfer of knowledge from the classroom to the workplace (Morris, 2008). By doing actual procedures (i.e. through work) trainees experience and become familiar with healthcare contexts similar to those in which they will work when they qualify (Morris, 2008).

Learning occurs when trainees interact with other members of the group, participating in team activities and working alongside others (Eraut, 2004). Trainee participation ensures their absorption into the group or the ‘community of practice’ (Swanwick, 2005). The group may include doctors and nurses as well as other allied healthcare professionals and trainee colleagues. This means that in the workplace trainees develop into professionals by “learning to talk the talk and walk the walk – adopting the behaviour and attitudes of the trade of their professional group” (Swanwick, 2005, p. 863). In addition to the development of professional behaviour, knowledge and skills such as clinical reasoning, history taking, physical examination and procedures are also learned effectively in the workplace (Morris, 2008).

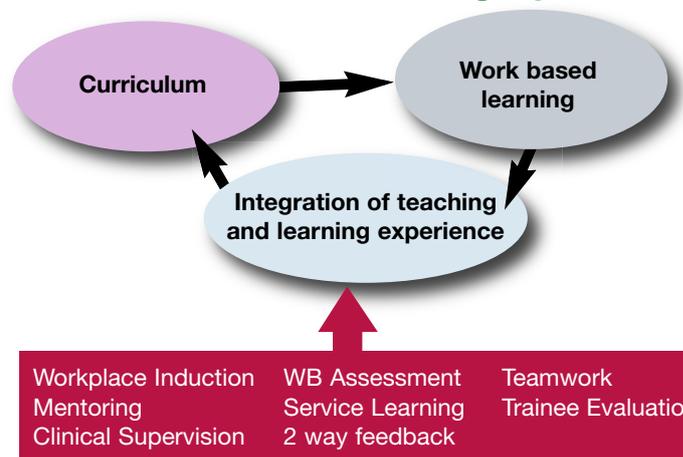
Although WBL has a role in the development of healthcare professionals, it faces several challenges that prevent its full realisation in the work environment.

What are the barriers to effective WBL?

These can be categorised as physical, mental or mechanical.

- ▶ The major physical obstacles to be overcome are time constraints and the opportunistic nature of learning in the work place. This includes the difficulty of predicting clinical events and ensuring that when students and trainees are present and willing to learn, ample patients with good clinical symptoms or signs are available. Understandably it would be impossible to produce uniform clinical experiences on a regular basis and in many ways this would go against the ethos of diagnostic enquiry. The key to maximising potential in clinical situations is developing teachers and facilitators who can recognise opportunities and make the most of their resources.
- ▶ Mental anxiety can have a major negative impact on learning performance in the workplace. Students and trainees should be made to feel welcome at all times and given a clear timetable to help with orientation. Experienced medical practitioners may have long since forgotten the initial shyness that many students have in the first encounters with real patients. Teachers and facilitators need to be sensitive to these issues and develop strategies to build confidence and help learners develop communication skills and rapport.

The Work based Learning Cycle



It is important to consider the cyclical relationships of curricular with work based learning in order to ensure that there is an effective integration of teaching and learning experiences which maximise the effectiveness of formal and informal on the job learning events. We need to ensure that these various strategies are implemented and utilised to aid these processes in order to maintain a dynamic, rigorous and effective learning environment.

Summary and practical strategies

"Learning opportunities should be made explicit in order to help students and trainees 'make sense' of what they see, hear, sense and do" (Morris, 2008).

- ▶ WBL is a popular mode of delivery, but it is important to ensure that explicit links are made between learning theory and clinical practice.
- Physical, mental and mechanical barriers exert pressure on teachers and learners. It is vital to be aware of how they affect you in your place of work
 - ▶ Barriers hinder the process of learning transfer
 - ▶ Awareness of potential barriers is key to ensuring resolution
- Solutions should improve the learning environment! Students need an active role and lack of feedback is a common complaint. You need to consider ways in which you can improve your current practice.
 - ▶ Strategies should be developed to overcome barriers
 - ▶ Aim for practical, transferable skills

▶ The major mechanical barrier to effective learning in the work place for trainees is the need to balance service and training commitments. Trainees often feel under pressure from their seniors to keep clinic consultation times short and ensure patients are not kept waiting. Or they may be influenced by the lack of time to ask questions or for more supervision during an operating list for fear of delaying the next case. These factors can limit the quality of learning opportunities and also hamper the trainee morale. A knock-on effect is that trainees under pressure are in turn, less likely to devote time to teaching undergraduate students or colleagues. Other mechanical barriers include issues such as consent from patients to be exposed to medical students and clinical risk during learning encounters, for example teaching practical procedures.

Solutions to barriers!

PROBLEM	SOLUTION
Time	<ul style="list-style-type: none"> ▶ Protected teaching time/clinics/lists ▶ Job planning
Resources	<ul style="list-style-type: none"> ▶ Staff motivation and training ▶ Patient selection ▶ Training the trainers, analysis of needs
Service Commitments	<ul style="list-style-type: none"> ▶ Organisation/negotiation with peers ▶ Sympathetic management ▶ Mentoring
Environment	<ul style="list-style-type: none"> ▶ Induction and team building ▶ Ergonomics e.g. providing room for students in clinic, appropriate use of space
Feedback	<ul style="list-style-type: none"> ▶ Training and opportunities for 2-way feedback ▶ Short term (task specific) and long term (goal setting) ▶ Trainee Evaluation
Supervision	<ul style="list-style-type: none"> ▶ Encourage students to take an active, professional role ▶ Promote teamwork ▶ Make learning explicit

Further Information

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