

DIGITAL CAPABILITIES CASE STUDY

DIGITAL ASSESSMENT OF VOCATIONAL SKILLS



[https://www.staffnet.manchester.ac.uk/
/umitl/resources/delivering-blended-
learning/digital-capabilities/](https://www.staffnet.manchester.ac.uk/umitl/resources/delivering-blended-learning/digital-capabilities/)



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Context/Scope

Trainee Doctors on the Manchester MBChB programme spend their final 3 years immersed in clinical practice, learning and honing a wide range of medical skills and procedures. Much of this learning is 'opportunistic' and students are encouraged to practice, and get feedback on, specific skills whenever possible. The 'digital logbook' approach and system we have developed provides them with both a framework to do this; guiding and encouraging them to complete tasks that will reinforce learning and help achieve competency, but also a mechanism for gathering and viewing feedback from clinical professionals to help inform and improve their techniques.

Outcomes

The students are also required to demonstrate competency through formal assessment, and this system (together with their skills examinations) demonstrates students' abilities to carry out specific clinical procedures.

The process, including practical advice about how to implement, resources needed, etc.

Undergraduate medical students in clinical placement are provided with a 'digital logbook' using our bespoke app 'eForms'. The logbook consists of a series of forms that students complete during their placement after undertaking particular clinical activities – e.g. a patient assessment or a specific clinical procedure. The forms collect the date, the activity and feedback from a qualified clinician. Each student has their own dashboard where the output from these forms is collated. Students (and their supervisors) can see the number of activities undertaken, as well as their level of competence (where relevant) and feedback. This can be used to inform subsequent learning as students work towards competency in a particular skill. The same system can be used to complete a formal assessment of a specific skill, which is then signed off by a known assessor and validated through the system to ensure the authenticity of the assessment. This can be used to demonstrate a student's ability to carry out specific procedures competently, as required by the General Medical Council.

This cycle of practice, feedback and assessment provides a scaffold for students to achieve competency in work-based skills that would otherwise be difficult to observe and capture. Allowing students to record these in the workplace on mobile devices improves accuracy and efficiency over paper-based forms. It also provides a real-time record of student activity. This has application to any vocational, work-based learning across the University.

Benefits/Challenges

The logbooks have improved significantly since they were first introduced in 2016. The validation method for formal assessments has undergone a number of iterations to get the balance between reliability and complexity right. Students and staff appreciate the record of engagement and feedback the dashboard provides and we hear very quickly from students when a form doesn't appear on their dashboard! The format and content of the forms has also been improved following feedback so that, in some cases, they provide more of a longitudinal view of student progression across the clinical years and in other cases a more focused, condensed record of a student's ability.

Which of the '6 elements' from the [Jisc Building Digital Capability Framework](#) does this case study relate to?



ICT Proficiency



Information, data and media literacies



Digital identity and wellbeing



Digital learning and development



Digital creation, problem solving and innovation



Digital communication, collaboration and participation



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