Adapting Objective Structured Practical Examinations (OSPE’s) to assess clinically-related science skills

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Introduction
- Objective Structured Practical Examination (OSPE) assessments - assess theoretical, practical and problem-solving skills at multiple stations.
- Marking criteria structured and published in advance.
- Students receive the same test and interaction with different examiners.
- Six stations, each assessing a mixture of different skills (Figure 1).
- Would this method be suitable to assess Honours sciences students in practical and communications skills?
- Is it an efficient method to assess a large Honours class and provide timely feedback?

Outline Protocol
- 100 students over 2 assessment days
- Assessment tasks introduced during an all day practical class
- VLE resources/extra tuition provided
- Students move round each station for assessment
- Objective and consistent
- Stations reusable and adaptable

Outcomes & Conclusions
- Students reported they found the process “a bit stressful” as they had to prove they knew how to perform specific tasks/skills.
- However, found it worthwhile preparation for upcoming practical work and employment opportunities.
- Staff felt it was a useful way of assessing wide array of graduate attributes at Honours level WITHOUT large amounts of paperwork.
- However, requires planning, clear aims and flexibility in initial stages (Figure 2).
- Students reported thinking more about skills expected in future employment, and also considering their strengths and weaknesses.
- Assessment of communications skills improved – sometimes forgotten in traditional science-based curricula.
- Students felt they could display their full range of knowledge, skills and abilities.

Advantages
- Can assess a range of graduate attributes not easily accomplished via traditional assessment methods
- Students often try much harder to succeed as they cannot hide behind written work or group work
- Easily adaptable for different skills, disciplines and locations
- Fast and easy way to assess practical skills in large groups of students

Disadvantages
- Lot of effort to initially set up
- Planning and organisation are key to success
- Some nervous students need reassurance if previously reliant on written work
- Need backup plans

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