Reflexiones sobre el refinamiento modular y el aprendizaje interprofesional en la educación clínica

Reflections on modular refinement and inter-professional learning in clinical education

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Abstract

Modular refinement of courses in clinical education is essential to improve the quality of tuition that students receive. This study looks at student feedback scores to determine if changes to group work and the introduction of interprofessional teaching staff improved the quality of the student experience. A mixed group of professionals taught three different cohorts of post-graduate clinical students. Prior to this, non-clinical staff, rather than a mix of medical educators, and clinical professionals taught the same course. Students' feedback about the class used four categories: *for relevance, for style/ mode of delivery, for organisation*, and *for enjoyment*. We compared the scores before after the intervention. Student feedback ranged from 9 -14 participants for each category. Following the module-redesign students' feedback scores increased in each category, with the largest increases coming in relevance. Matching the professional characteristics of the teachers to students can have a beneficial effect in terms of the relevance of clinical courses, as well as style, mode of delivery, and organisation. Student feedback can be used to determine the success of modular reforms if the correct psychometric measure are used in the feedback paperwork.

Key words: education, sociology, reform

Resumen

El refinamiento modular de los cursos en educación clínica es esencial para mejorar la calidad de la matrícula que reciben los estudiantes. Este estudio analiza los puntajes de los comentarios de los estudiantes para determinar si los cambios en el trabajo en grupo y la introducción del personal docente interprofesional mejoraron la calidad de la experiencia del estudiante. Un grupo mixto de profesionales enseñó a tres cohortes diferentes de estudiantes clínicos de posgrado. Antes de esto, el personal no clínico, en lugar de una combinación de educadores médicos y profesionales clínicos, enseñaba el mismo curso. Los comentarios de los estudiantes sobre la clase utilizaron cuatro categorías: por relevancia, estilo/ modo de entrega, organización y disfrute. Comparamos los puntajes antes de la intervención. Las opiniones de los estudiantes variaron de 9 a 14 participantes para cada categoría. Tras el rediseño del módulo, los puntajes de los comentarios de los estudiantes aumentaron en cada categoría, y los mayores aumentos se volvieron relevantes. La coincidencia de las características profesionales de los profesores con los alumnos puede tener un efecto beneficioso en términos de la relevancia de los cursos clínicos, así como del estilo, modo de entrega y organización. Las observaciones de los estudiantes se pueden utilizar para determinar el éxito de las reformas modulares si se utilizan las medidas psicométricas correctas en los documentos de retroalimentación.

Palabras clave: educación, sociología, reforma

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Introduction

We teach on a module called Assessment in Clinical Education; this is a master's level course and part of the masters in clinical education. The course typically has cohorts of 15 -25 students and will run between 2-3 times per year. The course is designed for clinical professionals and caters for doctors, dentists, nurses, paramedics, and other healthcare professionals.

The course comprises of study days and tutorial sessions with lecturers. For the purpose of this text, we shall focus on the day-session entitled: Assessment and Remediation. Where medical remediation is *"the process through which doctors' performance concerns can be addressed to facilitate a return to safe practice"* (Swanwick and Whiteman, 2013, p. 1). In this short communication, we will discuss the process of modular reform and group work. The learning outcomes for the day-session are to:

- Identify contemporary assessment methodologies.

- Understand the rationale for selection of methodologies.

- To be able to critically review the validity evidence for the methodologies.

- Understand how to synthesise key findings of the strengths and weaknesses of the evidence.

- Draw conclusions about the validity of assessment methodologies.

The day-session explores how validity in the assessment of remediation can or cannot be constructed, psychological theories of learning and an expert presentation by an employee of the National Clinical Assessment Service (NCAS). NCAS is the NHS organisation that conducts psychometric evaluations of clinical professionals that undergo remediation.

Module Design Theory

The module is taught in an interprofessional learning style, something which as an ap-

proach has been gaining ground in medical education (Curran, Sharpe, and Forristall, 2007). The sociological basis of such an approach being predicated on ideas close to what Bourdieu (2005) described as *structural homology* – Figure 1.
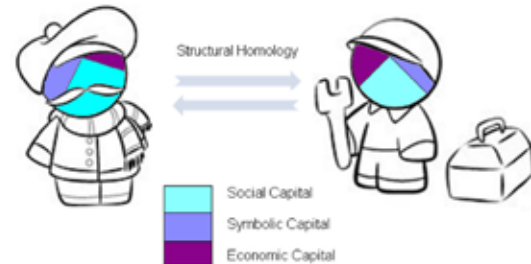

Figure 1. The nature of exchange in Bourdieusian terms - matching capital leads to interaction

Where the forms of capital that two groups possess (tutors and tutees), be they linguistics, social, economic etc. have structural affinities that lead to increased interaction. Consequently, it was predicted that such an approach would facilitate teaching that is more effective.

Methods - Modular Refinement

The module learning outcomes are intimately connected the students' first piece of summative coursework, entitled: A critical reflective analysis of an assessment methodology against the APA validity framework (Downing 2003). As such, the masters level teaching is designed to help promote skills of critical reflexive analysis in the students (White, Fook, and Gardner 2006).

Using what Kolb termed as an *Experiential Learning Cycle* (Kolb 1984), the modules undergo a continual review process of reflective post-course meetings between lecturers to help improve the transfer of learning, and so improve the content (Leberman and Martin 2004).

To assess the impact upon student learning of modular reforms we measured four areas in their feedback forms: relevance, enjoyment, style and organisation. To provide some historical data and context to the module, we

synthesised the student feedback scores for the last four iterations. The session in Feb-15 did not use an interprofessional learning approach, all the three subsequent ones did, and this is shown in Figure 1.

Results

The scoring system works in the following way, students were asked how they would rate the teaching for the aspects described, on a scale of 1-5 (with one being poor and five being excellent). Despite its limitations, the data gives an approximation of the progress that has been made in relation to our reforms. Student feedback ranged from 9 -14 participants for each category. We have collapsed the scores into a single info graphic for each category, by cohort for the period 2015 – 2016 in Figure 2.
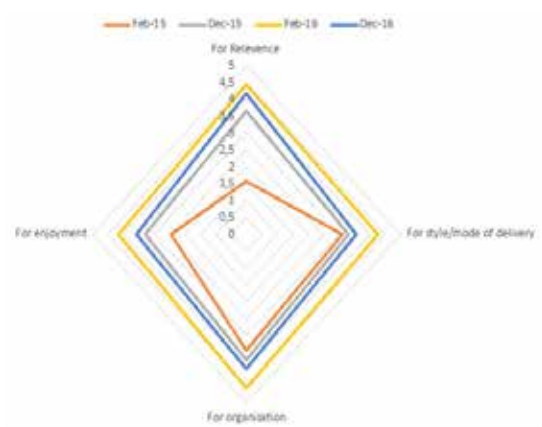

Figure 2. Module feedback 2015-16

Since we have introduced the interprofessional learning approach to our teaching, we have seen increases in all for four score areas, with the largest increases coming in *relevance*. This increased score may have been related to a discourse analysis of key remediation policy documents from the Academy of Medical Royal College (AoMRC 2009, 2012, 2013), and associated authors (Mascie-Taylor 2010, Foley 2014). We interrogated the texts from the position of a medical student looking for information on remediation. From this, we created a series of PowerPoint slides on the semantic context of remediation. It was felt that

this would also create the basis of a good discussion with the students.

In addition, it was important that we understood all the UK guidance that exists for doctors who are going through remediation. i.e. understanding the students perspective (J. Brooks and M. Brooks , 2000). This modular reform process indicated that collecting data on the relevance of the teaching was a useful indicator. More widely each time the course has been modified in accordance to the students' feedback it has become more enjoyable, more relevant, better organised and delivered in a more appreciable manner (Hattie and Timperley, 2007).

Interprofessional Group Work

Interprofessional group work in clinical education focuses on the social integration of differing groups, in the hope that such skills can be utilised in their own work practice (Reeves, Perrier, Goldman, Freeth and Zwarenstein, 2013). One group exercise that we introduced as part of the reform involved using four different vignettes of clinical malpractice adapted from real world cases in AoMRC documents. One vignette was about a doctor, the other three a nurse, dentists and physiotherapist. The students were put into groups of four and told which vignette they were to discuss, and we deliberately ensured that the doctors on the course did not get the vignette about doctors and so forth for the nursing students. i.e. we avoided putting clinical students into silos, as Nasca , Weiss , and Bagian (2014) highlighted as an issue. The students had 10 minutes to address specific questions, which we set them about the case, after which in their groups they debated the issue in class.

The fact that the scores (given in Figure 2) for relevance and enjoyment remained high for the sessions indicated that our attempts to provide students with more relevant literature worked. As a first attempt to address this issue,

the scores seemed to suggest it was effective, or at least was an improvement.

As with the group work, and modular refinement, although the data is limited it does give us an approximation of the changes between students overtime due to the interventions that we introduced into the classroom.

Conclusion

In conclusion, we hope to continue using student-feedback data to determine the success of our modular reform in the future. It seems that careful matching the professional characteristics of the staff to students can have a beneficial effect in terms of the relevance of clinical courses. Collecting this data is imperative to determine if the interventions we make work, and to improve the quality of the education.

Disclosure Statement

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

Funding

None to declare

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