Improving Assessment & Teaching in a Postgraduate Clinical Psychology Professional Training Module: Applying the Scientist-practitioner Module & Competency-based Approach

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I have written this brief report to share my experiences and reflections on teaching a postgraduate professional training module in clinical psychology and to highlight how “mapping” the competencies that characterise the discipline one teaches onto the aims and assessment methods utilised for teaching a particular module can result in substantial improvements in what is taught, assessed and learnt. I hope this reflective exercise can be of relevance to colleagues teaching in various professional training programmes in the medical and social sciences, irrespective of the particular discipline in which the interns are trained.

Background

The training one receives in clinical psychology has traditionally followed the scientist-practitioner model—clinical psychologists are trained to embrace a research orientation in their practice and to maintain clinical relevance in their research (John, 1998). This integrated approach has resulted in the long-held view that psychological practice should be evidence-based, integrating “the best available research with clinical expertise in the context of patient characteristics, culture and preferences” (American Psychological Association, 2006, pp. 273).

There has also been a strong emphasis in competency-based education in professional psychology (Kaslow, 2004). Clinical psychology professional training programmes aim to provide interns with knowledge, skills and experience so that they can demonstrate core foundational competencies in their profession when they graduate. In the medical professions, Epstein and Hundert (2002) defined competence as “the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served” (pp. 227), and this definition is also highly relevant for applied professional psychology. Supporting interns in developing intervention competencies is thus complex and involves helping them develop knowledge, skills and attitudes, which includes critical and reflective thinking as well as solid theory-research-practice integration skills.

Context, Aims and Content

Within this professional training context, I taught PLC5004 “Psychological Interventions and Therapies” at the Department of Psychology in academic years (AY) 2009/2010 and 2010/2011, as part of a comprehensive 2-year curriculum for the NUS Masters in Psychology (Clinical) programme. The programme involves other taught modules (i.e. Psychological Assessment, Child and Adult Psychopathology, Graduate Research Methods, Ethics and Professional Issues, Medical Psychology and Advanced Psychological Practice), four 4-month supervised clinical placements, a research thesis and four written case study reports.

PLC5004 aims to facilitate the development of knowledge and skills in evidence-based psychological interventions for various...
presenting problems in children and adults. The modes of teaching in PLC5004 included didactic teaching, videos, role plays, self-directed readings, small group discussions and case vignettes. The first three weeks focused on broad topics and skills (e.g. challenges in evidence-based practice; generic therapeutic skills; psychological formulation). The following ten weeks focused on evidence-based psychological interventions for specific disorders.

Teaching PLC5004 for the First Time in AY 2009/2010

When I first taught this module in AY2009/2010 (with a total of 10 students taking this module), I included the following modes of assessment:

- a small group presentation critically reviewing the evidence base of psychological interventions for specific psychological disorders [20% of the module’s continual assessment (CA) component];

- an essay critically reviewing the evidence for a psychological intervention not covered in the seminars (30% of the module’s CA component)

- a final exam paper which comprised of integrated research/ theory questions and/ or brief case vignettes (50% of the module’s CA component).

Student feedback, with a response rate of 50%, was positive for that semester (see Figure 1).

![Figure 1. Mean student feedback ratings by academic year (maximum best rating is 5).](image)

Nevertheless, based on my personal observations and informal intern feedback, there were several areas for improvement:

○ The assessment designed seemed “dry” and isolated from the learning aims of the course. The interns presented, often in rote mode, the evidence for or against a particular intervention with little consideration of the complex individual client and setting factors that could influence the decision-making process and treatment delivery. My initial choice of assessment methods provided few opportunities for interns to experience the process of thinking like a “scientist-practitioner”.

○ The presentation and the essay were targeting similar skills and knowledge, and involved similar learning processes (i.e. reviewing literature, critically presenting evidence, identifying gaps of problems with evidence); thus
opportunities for interns to learn and practice diverse skills were not provided.

○ The interns needed to be encouraged to be more active participants in the learning process in preparation for their roles as scientist-practitioners.

Teaching PLC5004 for the Second Time in AY 2010/2011

In an effort to redesign my assessment methods for the following academic year (AY2010/2011, with a total of 5 students taking the module), I mapped my existing assessment methods onto the three elements of evidence-based practice in professional psychology as outlined by the APA (2006; see Figure 2 and Table 1). The “mapping” illustrated in Table 1 clearly shows that the assessment methods for AY2009/2010 were inadequate in terms of supporting the development of clinical expertise and making links between research and specific client characteristics.

I then searched the existing literature on teaching graduate courses in professional psychology for other assessment methods that have been employed. A number of relevant papers were reviewed (i.e. Leffingwell, 2006; Lee, 2007; Rodolfa et al., 2005; Spruill et al., 2004). After evaluating the various assessment methods in the selected literature, the following methods were introduced in AY2010/2011, with the aim of actively engaging interns in their learning and providing opportunities for developing not only their knowledge, but also their case-applied thinking and clinical skills:

○ Intern-led workshops. Interns were actively included in the seminar by developing, organising and presenting intern-led workshops which focus on a particular intervention approach/technique; the intern would present the background and evidence base of this approach (theoretical component) as well as how this technique can be implemented in clinical practice (applied component) while discussing diversity issues. As the module was organised in a disorder-specific format, this workshop allowed interns to think “transdiagnostically” about intervention strategies and techniques that have been shown to be effective and can be employed for a range of clinical presentations. Compared to the evidence-based review presentation last year, this workshop provided interns the opportunity to learn about the technique (knowledge) and its background (theoretical basis), to examine its effectiveness (research) and to present on its applications (practice; “how to”), thus targeting multiple elements of developing professional competencies.
**Table 1. “Mapping” the assessment modes for PLC5004 in AY2009/2010 and AY2010/2011 onto the components of evidence-based practice in professional psychology (as illustrated in Figure 2).**

<table>
<thead>
<tr>
<th>Assessment components</th>
<th>Knowledge of best available research</th>
<th>Understanding and taking into consideration patient characteristics, culture and preferences</th>
<th>Developing Clinical Expertise</th>
<th>Critical Thinking</th>
<th>Reflective Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Year 2009/2010</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class presentation (critical review of Evidence-Based interventions for particular disorder)</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>?</td>
<td>X</td>
</tr>
<tr>
<td>Essay (critical review of research evidence for intervention not covered in seminars)</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Final Exam</td>
<td>✓</td>
<td>?</td>
<td>✓</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td><strong>Academic Year 2010/2011</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online training in evidence based intervention and reflective paper</td>
<td>✓</td>
<td>?</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Intern led workshop</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Case report written assignment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Final Exam</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
</tbody>
</table>

- **Case report written assignment.** A written case assignment replaced the literature review assignment of the previous year. The interns were given a choice of two detailed cases. They had to critically review the literature on psychological interventions for the particular case, identify evidence-based interventions and related resources, books, videos or web sites, after which they had to develop a proposed treatment plan and explore possible challenges (and solutions) in treatment. This written assignment created multiple opportunities for interns to consider theory-evidence-practice links as applied to a specific case, evaluate the available evidence-based options and make decisions based on client characteristics, thus targeting knowledge, skills and simulated practice.

- **Online training in evidence-based intervention and reflective paper.** A web-based individual training course on a evidence-based psychological intervention approach for children and young people was included as part of the assessment, together with a brief reflective paper for interns to critically discuss what they learnt and how they could apply this knowledge in practice. The online training course was accredited and involved a minimum of 10 hours of study, which the interns completed in their own time. The course involved reading, watching videos of clinicians practicing the intervention and pre- and post-completion quizzes. This assessment component provided opportunities for intern-led learning and reflection on how what was learnt could be applied in one own’s clinical practice.
Assessing Student Learning

When I “mapped” these proposed assessment methods onto the components of evidence-based practice in professional psychology (see Table 1) they appeared potentially much more useful in targeting the development of knowledge and skills in evidence-based psychological interventions practice that the assessment components introduced the year before.

As part of my revision, I also decreased didactic teaching, increased (and discussed in class) out of class readings and introduced more role play as well as “homework” exercises to mirror therapeutic processes and to encourage self-reflection. I gave interns individual feedback for each assessment component (which I did not do in the previous year) and used the final session to integrate key learning points across all modules.

Anonymous feedback from 100% of the interns in AY 2010/2011 was very positive and higher than in the previous year (see Figure 1). I also specifically asked interns for anonymous written feedback on each of the assessment components. On a scale of 1 to 7 (where 7 is most helpful/ relevant to learning needs), the intern-led workshops and the case report obtained the highest ratings (means of 6.8 and 6.6 respectively), followed by the online intervention training course (mean 5.8). The interns perceived the final exam as being the least helpful (mean 5.2) in relation to meeting their learning needs.

Refining PLC5004 for Subsequent Semesters

In Academic Year 2011/2012 (in which a total of 12 students took the module), I introduced a 48-hour take home exam instead of the final exam, which included a case vignette and a theoretical question particularly relevant to clinical practice. The informal feedback I collected from the class indicated that such an approach to exams was much more relevant to postgraduate clinical interns’ needs, as it “simulated” the realities of clinical work, where typically the clinician has a limited amount of time to do background research in order to gather the best available up-to-date knowledge in relation to a specific client’s presenting concerns. The interns indicated that for such an exam format in which the time allocated is limited, it may be more beneficial to focus on case vignettes and not on theoretical, essay-style, questions. This feedback will be taken into consideration in the next academic year’s revision of the module.

Reflections, Implications and Concluding comments

I designed and revised this module with the aim to train postgraduate clinical psychology interns in key clinical competencies, namely (a) critical thinking, (b) using and translating research into practice, and (c) developing knowledge and skills in evidence-based psychological interventions consistent with the scientist-practitioner model. Based on the feedback received from interns, the revised module seemed to be more interactive, was better at integrating theory, research and practice and most assessment components were rated as very helpful and relevant to their learning needs.

I found that reviewing the existing literature and contacting experienced teachers in the field was invaluable in my learning and development as a teacher; it also helped me to think in a more structured, systematic and goal-oriented way about how I plan and assess the module I am teaching. “Mapping” what I knew was important in my field onto what I was aiming to teach, carrying out self-assessment and obtaining formal as well as informal feedback from the interns really helped me to re-evaluate and revise my own assessment and teaching methods.

Endnote

1. As it is a compulsory component of the Masters in Psychology (Clinical) programme, enrolment for PLC5004 depends on the intake for the programmes each year and not on student preference.
Acknowledgements

I am grateful to Prof. Catherine M. Lee from the University of Ottawa for sharing her teaching experience and expertise with me. I am also very grateful to all postgraduate clinical psychology interns in academic years 2009/2010, 2010/2011 and 2011/2012 for their open, supportive and constructive feedback on the module and its assessment components.

References


Assessing Student Learning

About the Author

Dr Iliana Magiati is a clinical psychologist and teaches PL3255 “Introduction to Pediatric Psychology”, PL4224 “Child Abnormal Psychology” and PLC5005 “Child Psychopathology”. She believes that it is crucial for teachers to continuously reflect on and revise their teaching and to explore diverse ways to help students become more curious, ask more questions and consider how theories and concepts can be applied in the real world.