



## Increasing child and adolescent mental health content in undergraduate occupational therapy, social work and nursing programs: Lessons learnt

Mathijs Lucassen<sup>1</sup>, Iain Doherty<sup>2</sup> and Sally Merry<sup>1</sup>

1. Werry Centre for Child and Adolescent Mental Health, Department of Psychological Medicine, Faculty of Medical and Health Sciences, University of Auckland, New Zealand
2. Learning Technology Unit, Faculty of Medical and Health Sciences, University of Auckland, New Zealand

### Abstract

This paper investigates the perceived usefulness of a CD-Rom based child and adolescent mental health teaching resource distributed to educators from undergraduate nursing, occupational therapy and social work programs, and identifies the barriers to incorporating specialist mental health content into comprehensive degree level courses. Specially selected educators from throughout New Zealand responded to a questionnaire about the resource. Results from their feedback indicate that the resource was generally well received and that it was perceived to be useful for teaching at an undergraduate level. However, three main issues appear to be hindering the up-take of the resource in the relevant undergraduate programs: the resource content did not readily integrate into the various existing courses; several practical and additional barriers impeded the up-take and use of the resource; and incorporating a self-directed multi-media based teaching resource into a range of existing degree level programs that used a face-to-face group-based teaching model was perceived to be problematic. Recommendations are offered to assist in overcoming these difficulties in order to increase the extent of child and adolescent mental health teaching delivered at an undergraduate level.

### Keywords

nursing, occupational therapy, social work, tertiary education, evaluation, resource evaluation

---

### Introduction

Governments in New Zealand have long recognised the need to address the mental health of children and adolescents to prevent the occurrence of psychiatric problems in later life (Ramage, Bir, Towns et al., 2005). In particular, it is thought that if children and young people are unable to access mental health services, their problems may become 'more complex and difficult to manage by adulthood' (Ramage et al., 2005, p. 77). In recent years, funding has

increased considerably for child and adolescent mental health services (Mental Health Commission, 2001, 2004). *The Blueprint for Mental Health Services in New Zealand* set an access target for mental health services at 3% of the population under 20 years over a period of six months (Mental Health Commission, 1998, 2001, 2004). However, progress has been slow, and only 1.1% of those under 20 years of age in New Zealand were reported to have been seen by mental health services in the first six months of 2003 (Mental Health Commission, 2004).

- 
- Contact:** Mathijs Lucassen, Werry Centre for Child and Adolescent Mental Health, Department of Psychological Medicine, Faculty of Medical and Health Sciences, University of Auckland, New Zealand [m.lucassen@auckland.ac.nz](mailto:m.lucassen@auckland.ac.nz)
- Citation:** Lucassen, M., Doherty, I., & Merry, S. (2008). Increasing child and adolescent mental health content in undergraduate occupational therapy, social work and nursing programs: Lessons learnt. *Australian e-Journal for the Advancement of Mental Health*, 7(3), [www.auseinet.com/journal/vol7iss3/lucassen.pdf](http://www.auseinet.com/journal/vol7iss3/lucassen.pdf)
- Published by:** Australian Network for Promotion, Prevention and Early Intervention for Mental Health (Auseinet) – [www.auseinet.com/journal](http://www.auseinet.com/journal)  
Received 12 May 2008; Revised 3 November 2008; Accepted 3 November 2008

Workforce issues have been consistently identified as constituting a major constraint on progress towards service provision in child and adolescent mental health (Ramage et al., 2005). For example, many District Health Boards in New Zealand fail to fill their vacant positions (Mental Health Commission, 2004), with staffing being a particular problem in the northern region of the country (Mental Health Commission, 2004). Mental health workforce shortages have also been identified as an area of concern in Australia (Gough & Happell, 2007; Productivity Commission, 2005), and the Department of Health in Great Britain (2004, p. 41) reported that 'a significant increase in the workforce' is required in the British child and adolescent mental health sector. It seems clear that the sector in a number of countries needs many more skilled health professionals in order to facilitate an improvement in the delivery of services in child and adolescent mental health. The staff that currently make up the child and adolescent mental health workforce in New Zealand come from a diverse range of professional backgrounds, and include social workers, psychologists, nurses, medical practitioners, psychotherapists, occupational therapists and others (Khin, 2002). These professionals work in multi-disciplinary teams and their numbers (Khin, 2002) and composition (Lambie & Stewart, 2003) vary considerably across areas and teams.

Despite working in a range of child and adolescent mental health services, nurses, occupational therapists and social workers receive minimal (if any) training in this area at an undergraduate level (Peters, 2003). In addition, Peters (2003, p. 42) suggests that although there is some adult mental health content taught across nursing, occupational therapy and social work programs there is still a 'lack of value placed on mental health [content] by some students and some non-mental health staff' (p. 42). Fortunately, the key stakeholders consulted in the Peters (2003) study expressed an interest in increasing child and adolescent mental health training and it was thought that this teaching had the potential to increase students' theoretical knowledge. It was also assumed that extra training had the potential to influence students' career intentions positively, as educational experiences have the ability to

change students' preferences towards certain practice areas (Christie, Joyce & Moeller, 1985; Doyle, Madigan, Cash & Simons, 1998; Happell & Rushworth, 1999; Lewicki, Smith, Cash et al., 1999; Wittman, Swinehart, Cahill & Michel, 1989). Increased teaching in the area has the potential to make a contribution to reducing workforce shortages in the sector and, by extension, this could improve the mental health of children and young people in New Zealand.

In 2004, the Ministry of Health funded a project through The Werry Centre (based in the Department of Psychological Medicine, University of Auckland) to provide workshops in the area of child and adolescent mental health for undergraduate nursing, occupational therapy and social work students. The aim of the Werry Centre ([www.werrycentre.org.nz](http://www.werrycentre.org.nz)) is to improve the mental health of infants, children and adolescents in New Zealand by providing high quality research and teaching in infant, child and youth mental health; advocating for the mental health needs of infants, children and adolescents; and supporting the infant, child and adolescent mental health workforce to provide high quality care. The Werry Centre government funded project had two main objectives. The first was to attempt to influence students' career intentions positively with respect to entering into the child and adolescent mental health workforce. This objective was to be achieved through the provision of a series of 14 workshops delivered across New Zealand and the results of this facet of the project are reported elsewhere (Lucassen, Robinson & Merry, 2007). The second objective of the project was to increase the amount of child and adolescent mental health teaching delivered to these students.

The funding for the original workshops was time-limited and in order to ensure that the well received face-to-face child and adolescent mental health teaching would continue once the project came to an end, a CD-Rom based resource and accompanying workbook was developed in consultation with educators from various polytechnics and universities (Lucassen, Doherty & Merry, 2005). The workbook transposed the face-to-face teaching content to a multi-media format with the aim of making the initial workshop project sustainable in the longer term. Pearson Education published the CD-Rom

workbook and copies were sent to all of the degree level nursing, occupational therapy and social work programs in New Zealand. In this study we investigated the success of this approach by assessing the perceived usefulness of the resource amongst educators and by identifying the barriers to introducing specialist child and adolescent mental health content into comprehensive undergraduate programs. This research was deemed valuable as the evaluation of e-learning/resources is increasingly being viewed as a crucial issue in higher education (Oliver, McBean, Conole & Harvey, 2002; Underwood, 2004). Despite this, evaluation (if it occurs) has usually been a secondary consideration as funding has been primarily directed at the development of particular e-resources (Cotton & Gresty, 2007).

## **Method**

### ***Procedure***

Ethical approval for this follow-up study was sought and granted by the University of Auckland Human Participants Ethics Committee prior to the questionnaires being sent out (reference number 2007/Q/041). In October 2007, a questionnaire was distributed to all the educators who had participated in the 14 original workshops. Where an educator had left the institution, another appropriate educator was identified and a survey was sent to that educator. An information sheet ensured that participants knew that the results of the questionnaire would be anonymous and that returning the questionnaire constituted provision of consent to take part in the study.

### ***Questionnaire***

The questionnaire was developed to assess the extent to which the workbook had been used within undergraduate nursing, occupational therapy and social work teaching since 2005 (i.e., after the original workshops had come to an end) and, if the resource had been used, how valuable educators had found the resource for their teaching. The questionnaire incorporated five closed questions (which included an opportunity to expand/explain responses); three statements with visual analogue scales (and spaces to elaborate on ratings); four open questions; and a section for additional comments (see Appendix A).

## ***Analysis***

The median for each of the three visual analogue scales was converted into a percentage score and the interquartile range reported. All written responses were subjected to thematic analysis. The first author read and re-read the data several times before identifying potential themes and allocating responses to the identified themes. The second author checked the accuracy of the potential themes in terms of the allocated responses. The accuracy check identified some minor discrepancies in interpretation and these were resolved through discussion between the first and second author. We were not overly rigid in making decisions about what constituted a 'theme' as we considered the importance of a theme to be less dependent on its prevalence, and more dependent on whether it captured something of conceptual importance in relation to the overall research question (Braun & Clarke, 2006). Hence, for this study a theme was counted if it was judged to be important, regardless of its prevalence in the data set.

### ***Workbook development and content***

The resource was based on the content from the original workshops. Written post-workshop feedback from 328 students and 15 educators helped to inform the development of the resource. To ensure that the resource was appropriately grounded in research and to further ensure that the content matched the needs of a diverse group of undergraduate students, three advisory groups were convened and consulted throughout the development process. These groups consisted of experts in the field of child and adolescent mental health, educators in nursing, occupational therapy and social work, and a Māori advisory group.

A 'matrix format' was used to help prioritise content used in the workbook. This matrix meant that the teaching could be delivered according to three sections: child and adolescent development, child and adolescent mental health assessment, and types of treatment in the field of child and adolescent mental health (with each section being delivered on a separate CD-Rom). The teaching could also be delivered across disorders: conduct disorder, psychosis, anxiety, depression and attention-deficit hyperactivity disorder. The resource included a range of media

such as written text, custom-made video clips, sourced and created graphics, commissioned cartoons, and interactive tasks such as drag and drop activities created using Macromedia Flash. The interactive tasks were designed to encourage students to integrate theoretical knowledge into 'real life' or clinical contexts and model answers were provided for the learning exercises.

Section One of the workbook focused on child and adolescent development with a particular emphasis on attachment, temperament and cognitive and emotional development. An example of a learning exercise from this section was 'on page 11 of CD One, Kiani, Sarah and Jordan talk about their definition of family. Based on these video clips, discuss how a child's age and/or culture impacts upon definitions of family' (Lucassen et al., 2005, p. 9). Section Two reviewed child and adolescent mental health assessment (which included simulated clinical interviews). In this section students were asked to engage in activities such as 'complete the interactive learning exercise on page 14 (CD Two). Which of the factors are advantages and which are disadvantages of using classification systems like ICD-10 and DSM-IV?' (Lucassen et al., 2005, p. 39). Section Three addressed child and adolescent mental health treatment across the selected disorders and asked students to define the role of a nurse, occupational therapist or social worker in child and adolescent mental health services.

## Results

Of the eighteen educators contacted, seven had been appointed to their positions since the workshops took place in 2004. Ten surveys were returned from eight out of the 14 educational institutions. Completed questionnaires were received from across the country, from the three professional groups (five nursing, three occupational therapy and two social work responses) and from both polytechnics and universities.

Nine of the ten respondents taught students about psychosocial or mental health issues. All the respondents reported that their institutions' library had a copy of the workbook and seven had used the workbook with their students. Eight participants rated the resource's usefulness, and the median was moderately favourable at 77%

(100% = extremely useful as a teaching resource, interquartile range = 57% to 91%). Seven educators rated the workbook in relation to how well it corresponded to their students' abilities and the median was favourable at 79% (100% = extremely well matched to my students' abilities, interquartile range = 75% to 98%). Seven participants responded to the question about the design of the resource and the median was also positive at 78% (100% = extremely well designed to meet student needs, interquartile range = 53% to 83%).

Five themes were identified after analysing the participants' written responses. The predominant theme concerned positive feedback and comments about the workbook. For example one educator stated:

*[The] NZ context, actors, accents – few resources available like this. Role plays with model actions and replies [all perceived strengths of the resource].*

The second theme highlighted that the child and adolescent mental health content of the resource did not easily fit into the existing programs. Examples include:

*The design of our program does not allow for much content directly related to working with children and adolescents with mental health issues.*

*It is a great resource and we need to find places in the curriculum for it – not easy due to complexity of curriculum.*

The third theme covered identification and description of additional barriers to the up-take of the workbook, most notably '[I] did not know about it [the workbook]', 'Time!!!' and not always having access to a computer with a CD drive.

The fourth theme acknowledged that it was challenging for educators to incorporate a different approach to teaching into their existing programs. For example, one educator commented that:

*Due to the fact [that] it was predominantly [a] self-directed resource, we weren't able to use the entire resource.*

Finally, the workbook was perceived to be useful for students who were about to go on child and adolescent mental health placements or for staff who were new to the area of child and adolescent mental health. For example, one educator stated that:

*I have given the resource to students who are going to specialist services in mental health who work with youth.*

Another educator responded:

*Both student feedback and new staff starting in the area of CAMHS [Child and Adolescent Mental Health Services] have found this resource very useful.*

## **Discussion**

Learning technologies are increasingly being employed in all contexts including higher education (Cotton & Gresty, 2007) and the use of computer technology has expanded and grown in undergraduate health and social work education (Seabury & Maple, 1993; Washer, 2001). We embraced computer-aided learning because we believed that it had the potential to be innovative, exciting and educationally beneficial and because it had the capacity to sustain a time-limited project that would otherwise have come to an end with the cessation of the face-to-face workshops. The provision of the multi-media resource also had the potential to allow students to study at their own pace and to study flexibly in terms of a time and place of their own choosing so that they might be in control of their learning (Race, 1994). Through evaluating the CD-Rom workbook we have shown that the multi-media resource was perceived to be moderately useful to educators from eight out of the 14 institutions where the original workshops took place. It was also encouraging to learn that a copy of the resource was available in all eight surveyed institution's libraries as this ensures that at the very least the resource is freely available to students motivated to learn more about child and adolescent mental health. Interestingly, despite the fact the resource was initially developed for the campus-based teaching of undergraduate students, educators responding to the questionnaire commented that the resource was especially useful for students who were about to go on placement or for staff new to the area of child and adolescent mental health.

The results of the questionnaire highlighted three main barriers or issues that currently hinder the up-take of this resource in undergraduate nursing, occupational therapy and social work programs. Firstly, the content did not readily integrate or 'fit' into the various existing programs. Integrating the workbook into a range

of nursing, occupational therapy and social work programs requires additional time and extra effort on the part of educators. However, educators are 'time poor' (Goodyear, 2005) and they need to prioritise their activities in terms of institutional demands. As much as the authors of this paper would like to ensure more child and adolescent mental health content is delivered at an undergraduate level, at present there are no requirements within institutions that would ensure this content is in fact included. This is understandable considering that the various courses are three to four years in duration and child and adolescent mental health as a topic is perceived to be specialist content, and as a result it is viewed as less important than core skills and knowledge.

The second major barrier concerned practical and other barriers that hindered the up-take of the workbook. One such issue is that educators do not always have access to a computer with a CD drive, a fact that immediately prevents them from making use of the resource in their workplace. Students face similar technological barriers. For example, Washer (2001) noted that across educational institutions there are never enough computers to match student demand. Another major barrier to the up-take of the resource was that educators did not know about the resource. This is not a surprising find when one considers that seven of the educators were appointed to their positions after the initial workshop series had come to an end. Since there is a relatively rapid turnover of staff in the field, identifying newly appointed educators and contacting them either through a letter or via email with practical suggestions about how to best use the resource would probably help to prompt newly placed educators to use the workbook.

The third barrier for educators concerned the adoption of a different approach to teaching because the workbook was a self-directed multi-media teaching resource whilst the majority of programs operated in terms of a face-to-face group-based teaching model. The fact that the workbook was self-directed meant that it did not naturally lend itself to group-based teaching. However, as indicated earlier by educators, the self-directed approach to student learning has potential value for students about to go on a

placement in the field or for staff new to the area of child and adolescent mental health.

This study had several limitations. Most notably, we did not receive feedback from all of the educators involved in the original workshops (responses were not received from six institutions) and students were not surveyed for their feedback. Additionally, despite the claims of considerable benefits to both students and educators, if computer assisted learning strategies are adopted (Cotton & Gresty, 2007) then the question of whether the new implementation actually enhances student learning needs to be addressed (Cotton & Gresty, 2007). This means that in addition to trying to ensure the workbook is integrated into various undergraduate nursing, occupational therapy and social work programs in New Zealand, the future focus of evaluations like ours should also seek to determine the student experience and learning that occurs as a result of using a CD-Rom workbook.

The goal of evaluating the impact on student learning might be achieved through utilising the design research approach advocated by, amongst others, Thomas Reeves (Herrington, Oliver & Reeves, 2002; Reeves, Herrington & Oliver, 2005). Design research is appropriate for evaluating a resource of this type as it involves a long-term research commitment to what are perceived to be complex problems critical to higher education. It also involves a commitment to theory construction in order to improve learning (Blake & Doherty, 2008) or, in the words of Thomas Reeves (2005, p. 101) and colleagues, 'to make education better'. The design research approach to evaluating educational interventions contrasts with decades of 'one-off' evaluations of particular and isolated teaching interventions that have failed to provide 'academics with a robust set of design principles that can guide them in the integration of computers and other technologies into teaching and learning at the post-secondary level' (Reeves et al., 2005, p. 103). With respect to the fact that our study did not survey students, future work in this area would have to seek to measure improvement in student learning in terms of attainment of the desired learning outcome(s) (Blake & Doherty, 2008). However, this approach would require a considerable

commitment from researchers and participants across multiple institutions and over an extensive period of time that would typically range from three to five years (Blake & Doherty, 2008). It is perhaps for this reason, design research as a methodology is still not widely employed (Reeves et al., 2005). However, if educational research is to be socially responsible – that is, if it is to address the question of improving education – then commitment of this sort is required.

Four main recommendations have emerged from this study, based on educator feedback:

1. The Werry Centre staff endeavour to remind relevant educators in nursing, occupational therapy and social work about the resource on an annual basis whilst continuing to offer free copies of the workbook to interested educators, as this will promote and encourage the use of the resource.
2. The Werry Centre staff might develop some practical suggestions to assist educators in integrating the resource into the various undergraduate programs and offer one-on-one support for educators interested in discussing how to incorporate the workbook into their teaching.
3. The Werry Centre staff could also update, modify and add some additional information to the resource and investigate alternative and more flexible methods of delivering the workbook content. For example, the resource might be offered online with the Werry Centre supporting educators in the implementation of the resource.
4. Certain specialist content (such as child and adolescent mental health) might be prioritised for compulsory inclusion in undergraduate nursing, occupational therapy and social work programs as certain areas need more focused attention.

## **Conclusion**

Our recent survey of nursing, occupational therapy and social work educators established that the child and adolescent mental health resource was generally well received and perceived to be somewhat useful for most of the undergraduate programs involved with the original workshops. However, three main issues currently appear to be hindering getting the

resource successfully embedded into the relevant courses in New Zealand. Increasing the amount of child and adolescent mental health teaching delivered in New Zealand is an important component of any strategy to address the chronic shortage of suitably qualified health professionals willing and able to work in the field of child and adolescent mental health, which as an area has been historically under-resourced.

### Acknowledgements

The authors thank the New Zealand Ministry of Health for funding this child and adolescent mental health workforce development project via the Werry Centre (Department of Psychological Medicine, University of Auckland). We would also like to thank all the advisors, educators and students involved in this project.

### References

Blake, A.R. & Doherty, I. (2008). An instructional design course for clinical educators: First iteration design research reflections. *Journal of Learning Design*, 2(2), 104-115.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.

Christie, B.A., Joyce, P.C., & Moeller, P.L. (1985). Fieldwork experience, Part I: Impact on practice preference. *American Journal of Occupational Therapy*, 39, 671-674.

Cotton, D.R.E. & Gresty, K.A. (2007). The rhetoric and reality of e-learning: Using the think-aloud method to evaluate an online resource. *Assessment & Evaluation in Higher Education*, 32(5), 583-600.

Department of Health (2004). *National Service Framework for Children, Young People and Maternity Services: The Mental Health and Psychological Well-being of Children and Young People (Standard 9)*. London: Department of Health.

Doyle, R.G., Madigan, M.J., Cash, S.H., & Simons, D.F. (1998). Academic factors and changes in practice area preference. *Occupational Therapy in Mental Health*, 14(3), 1-20.

Goodyear, P. (2005). Educational design and networked learning: Patterns, pattern languages and design practice. *Australasian Journal of Educational Technology*, 21(1), 82-101.

Gough, K. & Happell, B. (2007). We can't find the solution until we know the problem: Understanding the mental health nursing labour force. *Australasian Psychiatry*, 15(2), 109-114.

Happell, B. & Rushworth, L. (1999). Psychiatric nursing: Can education help it become more popular? *Australian Electronic Journal of Nursing Education*, 5(1), [www.scu.edu.au/schools/nhcp/aejne/archive/vol5-1/happellvol5\\_1.html](http://www.scu.edu.au/schools/nhcp/aejne/archive/vol5-1/happellvol5_1.html)

Herrington, J., Oliver, R., & Reeves, T.C. (2002). *Patterns of engagement in authentic online learning environments*. Paper presented at the Ascilite 2002, Winds of Change in the Sea of Learning: Charting the Course of Digital Education, Auckland, New Zealand.

Khin, N. (2002). *Preliminary Needs Analysis of the Child and Adolescent Mental Health Workforce*. Auckland: Werry Centre, University of Auckland.

Lambie, I. & Stewart, M. (2003). *Training, Recruitment and Retention Strategies for Psychologists in Child and Adolescent Mental Health Services: A Mainstream Perspective*. Auckland: Werry Centre, University of Auckland.

Lewicki, E.L., Smith, S.L., Cash, S.H., Madigan, M.J., & Simons, D.F. (1999). Factors influencing practice area preference in occupational therapy. *Occupational Therapy in Mental Health*, 14(4), 1-19.

Lucassen, M., Doherty, I., & Merry, S.N. (2005). *Child and Adolescent Mental Health in Aotearoa/New Zealand: An Overview*. Pearson Education N.Z.: Auckland, New Zealand.

Lucassen, M.F.G., Robinson, E., & Merry, S.N. (2007). Impact of a workshop on motivation to pursue a career in child and adolescent mental health. *Australian and New Zealand Journal of Psychiatry*, 41, 618-624.

Mental Health Commission (1998). *The Funding Needed for Mental Health Services in New Zealand*. Wellington: Mental Health Commission.

Mental Health Commission (2001). *Report of Progress 1998-2000 - Towards Implementing the Blueprint for Mental Health Services in New Zealand*. Wellington: Mental Health Commission.

Mental Health Commission (2004). *Report on Progress 2002-2003 - Towards Implementing the Blueprint for Mental Health Services In New Zealand*. Wellington: Mental Health Commission.

Oliver, M., McBean, J., Conole, G., & Harvey, J. (2002). Using a toolkit to support the evaluation of e-learning. *Journal of Computer Assisted Learning*, 18(2), 199-208.

Peters, J. (2003). *A Review of Undergraduate Training in Child and Adolescent Mental Health*. Auckland: Werry Centre, University of Auckland.

Productivity Commission (2005). *Australia's Health Workforce: Productivity Commission Research Report*. Canberra: Australian Government Productivity Commission.



