# Title page

# Full title of manuscript:

Occupational therapy student learning on role-emerging placements in schools.

#### Short title:

Student learning on role-emerging placements.

#### Author 1:

Karina Dancza, PhD, MA(SEN), BAppSc(OT), Assistant Professor, Health and Social Sciences Cluster, Singapore Institute of Technology. <a href="http://orcid.org/0000-0003-3291-4467">http://orcid.org/0000-0003-3291-4467</a>

## Author 2:

Jodie Copley, PhD, BOccThy(Hons), Associate Professor, Division of Occupational Therapy, School of Health and Rehabilitation Sciences, The University of Queensland.

#### Author 3:

Monica Moran, DSocSc, MPhil(OT), DipCOT, Associate Professor of Rural Health, Western Australian Centre for Rural Health – WACRH, The University of Western Australia.

#### Correspondence:

Karina Dancza

c/o Singapore Institute of Technology, 10 Dover Drive, Singapore, 138683.

Email: karina.dancza@singaporetech.edu.sg

Telephone: +6565921486 / +6591677834

#### Research ethics:

Ethics approval was received from The University of Queensland, reference number: 2011000720, 23 June 2011 and Canterbury Christ Church University, reference number: UoQ/2011000720, 10 November 2011.

# Conflict of interest (COI):

The Authors confirm that there is no conflict of interest.

# Funding:

This research received no specific grant support from any funding agency in the public, commercial, or not-for-profit sectors.

# Acknowledgements:

This research would not have been possible without the expert guidance from Professor Sylvia Rodger. Thank you also to the students and supervisors who contributed to this study.

# **Keywords**

- Occupational therapy
- Role-emerging placement
- Transformational learning
- Supervision
- Theory
- Student learning

#### Published reference:

Dancza K, Copley J, Moran M. Occupational therapy student learning on role-emerging placements in schools. British Journal of Occupational Therapy. 2019;82(9):567-577.

doi:10.1177/0308022619840167

# Occupational therapy student learning on roleemerging placements in schools

# **Abstract**

Introduction: Placements are considered vital in promoting theory-to-practice learning. With roleemerging placements increasingly being offered, the learning processes experienced by students warrants further investigation. This research explored the learning experiences of students, from both supervisor and student perspectives, over the duration of a role-emerging placement in schools, to contribute to our understanding of this important student learning process.

Method: Action research was used across four cycles with 14 students and 11 supervisors. Data were collected through reflective field notes, placement documentation and semi-structured interviews. Findings were analysed using template analysis. Findings: Limited established occupational therapy procedures and role models meant that the students created and used knowledge differently from role-established placements. The procedural knowledge upon which students most heavily relied in previous placements was largely inaccessible to students. Students relied on occupational therapy conceptual and dispositional knowledge, with the support of their peer and supervisor to guide practice. Tensions were seen between providing a service for the school and taking the necessary time to understand and implement the occupational therapy process systematically. Conclusion: Role-emerging placements are valuable for transformational student learning. These placements do, however, present challenges that require careful negotiation and structured guidance.

# Introduction

Occupational therapy fieldwork education, or placements, are vital in promoting theory-to-practice learning and are an essential component to students' education (Leclair et al., 2013; Roberts et al., 2015). Placements typically occur within 'role-established' practice settings, such as hospitals or community health services (Overton et al., 2009). In many countries, however, placements have expanded to include innovative practice education models, which are often referred to as alternative, role-emerging or non-traditional placements (Overton et al., 2009; Schmidt, 2010). Role-emerging placements are defined as placements that 'occur at a site where there is not an established occupational therapy role' (College of Occupational Therapists, 2006). Students are super-vised on a day-to-day basis by a staff member within the setting who is not an occupational

therapist (called an 'on-site supervisor') and provided with additional, but less frequent, supervision by an off-site occupational therapist (called a 'long-arm supervisor') (Overton et al., 2009). Examples of role-emerging placement set-tings include shelters for the homeless, aged care homes and school settings (Clarke et al., 2014).

The popularity of role-emerging placements has grown as university programmes expand because they help address placement shortages (Roberts et al., 2015). The value of role-emerging placements has also been recognised as a way of preparing students to work in diverse settings on graduation (Bossers et al., 1997; Fortune et al., 2006).

Research investigating the way in which students learn during these placements and the value of this learning, however, is not well established (Clarke et al., 2015; Dancza et al., 2013). The present study focused on student learning within role-emerging placement settings, specifically primary and secondary schools in the United Kingdom (UK). School-based practice is an emerging area for occupational therapists in the UK as therapists are predominantly employed within health rather than education services (Hutton, 2008).

## Literature review

Placements offer students opportunities to use, consolidate and blend university learning with practical application, which develops students' professional reasoning and confidence as emerging occupational therapists (Clarke et al., 2015; Thew et al., 2008). Student learning during their placement comprises of personal skill development (communication, reflective and self-directed learning skills) and professional skill development (use of theory, evidence and reasoning) (Nicola-Richmond et al., 2016; Robinson et al., 2012). Moreover, there is evidence that supports the influence of placements on students' self-efficacy (one's belief in one's own ability to do a task, despite obstacles), as students are challenged to learn and demonstrate the professional reasoning required of a novice occupational therapist (Andonian, 2017).

An international systematic mapping review of published work on placement education (Roberts et al., 2015) included 124 articles, predominantly from the United States of America, Australia, the UK and Canada. Only 10% (13 papers) focused on placement teaching practices, 6% (8 papers) on placement assessment practices and 2% (3 papers) on the placement learning environment. This limited research focus on the influence of the placement learning environment, teaching and assessment practices may reflect the complexities involved in understanding how students learn. Merely experiencing a placement does not necessarily equate to achievement of students' personal and professional skill development. This is because knowledge does not solely exist in students' Student learning on role-emerging placements

minds, waiting to be released, but is created in the interactions they have with other people, situations and contexts (Dall'Alba, 2009). In the case of occupational therapists, this might include inter-actions with supervisors, peers, other professionals and service users, and experiences providing therapy services (Rodger et al., 2008).

Within a role-established placement, it is anticipated that students will observe, learn from and be supervised by occupational therapists in the setting. The intended outcome of this form of supervision is that students gradually become independent in their practice (Brown et al., 2015). While learning established practices offers a useful starting point for students, they also require opportunities to transfer and adapt knowledge from where they first encounter it (traditional placements or university) to novel situations (settings without established occupational therapy practices). These opportunities can be transformational to students' understanding of the profession, as students think critically about what they are doing and enhance their reflexive practice (Dall'Alba, 2009). Role-emerging placements can offer a rich environment to expand students' views of the scope of occupational therapy from historical boundaries of occupational therapy practices, policies and routines (Clarke et al., 2014). Limited literature, however, explains how this learning happens.

One study which did investigate the learning experiences of two students on a role-emerging placement was reported by Fieldhouse and Fedden (2009). In this study, authors used participant observation and journal-keeping by the researcher (who was also the long-arm supervisor) to record ideas about students' learning experience during the role-emerging placement. These journal entries were then used as the basis of two focus group discussions with the students, tutors and on-site supervisors, which occurred during weeks 6 and 7 of the 7-week placement. Authors reported that the nature of the role-emerging placement, where students explored the potential of occupational therapy for themselves, resulted in surface-to-deep learning. Self-negotiated learning, where students outlined how they proposed to meet the prescribed learning outcomes for the placement, was highlighted as a vital process to facilitate deep learning (Fieldhouse and Fedden, 2009).

Two further studies also described the learning pro-cess of students who had experienced a role-emerging placement at least 6 months prior to the data collection and were graduates when the research was conducted. Thew and colleagues (2018) surveyed 19 students and interviewed six students who had experienced a role-emerging placement in the UK. These students perceived that the role-emerging placement promoted confidence in using occupation-focused models in their graduate roles. The authors suggested that the structure of the role-emerging placement and lack of

existing occupational therapy role enabled students to apply occupation-focused models in practice, resulting in 'ah ha' moments of understanding.

The other study reported on five graduates who were interviewed at least 6 months into their graduate roles (Clarke et al., 2015). These participants also perceived that their professional identity was enhanced by the role-emerging placement. Interestingly, it was reported that students who worked in role-emerging areas post-graduation maintained their sense of identity, whereas those who chose traditional settings experienced more frustration at being unable to practice in a way that reflected their professional vision of themselves. The authors proposed that this occurred because the role-emerging placement setting allowed students to implement practice that was congruent with the philosophy of occupational therapy, formulating their professional identity.

While studies of role-emerging placements have considered the learning experiences of students through interview at either one time point (Clarke et al., 2015; Thew et al., 2018), or two time points within a week of each other (Fieldhouse and Fedden, 2009), they did not consider how students learned at different time points across the duration of the placement.

Our research explored the learning experiences of students from both supervisor and student perspectives over the duration of a placement using a range of data sources, including reflective field notes, placement documentation and interviews. The aim of the study was to contribute to our understanding of this important student learning process (Rodger et al., 2014). The specific context of this study was final (third) year occupational therapy students completing role-emerging placements in primary and secondary school settings, in the UK.

#### Method

This study employed action research methodology, whereby a cyclical process of four reflection and action cycles was used (Patton, 2015). The Four cycles were conducted during consecutive 10-week, full-time student placements over an 18-month period. An overview of the methods is presented here to provide relevant context to the study, with a detailed description of the methods previously reported elsewhere (Dancza et al., 2016).

#### Context

All students and long-arm supervisors were from the same university in England, with a mixture of local mainstream and special school settings as placement sites (Appendix 1). All settings were new to taking occupational therapy students for role-emerging placements at the beginning of the study (although two settings were used twice during the study).

The occupational therapy programme was a three-year undergraduate Bachelor of Science (Occupational Therapy) course. Students completed full-time placements in each year of their programme: a 6-week placement in their first year, two 6-week placements in their second year and a final 10-week placement in their third year. Role-emerging placements usually occurred in the final year. Students could indicate preferences; however, placements were allocated to ensure a range of experiences for each student on graduation.

#### Ethical approval

Ethical approval was provided by both the researchers' host university and the Faculty of Health and Social Care Research Ethics Committee at the participating university. Written consent was obtained from students and supervisors. Participants were informed that they could withdraw from the research at any time without giving reasons and that withdrawal would not impact on their studies or employment.

#### **Participants**

Students, schools and supervisors were recruited via the placement allocation team following usual university procedures, which were independent of the researcher. Opportunistic sampling was used to recruit a range of participants rather than attempt to contrive a representative sample (Patton, 2015). The sampling strategy also involved an element of homogeneous sampling (Patton, 2015) as all students were in their third and final year, undertaking a role-emerging placement in a school setting, with a student peer. This offered an opportunity to explore the experiences of pairs of students and super-visors who were undertaking placements in broadly similar contexts. Thus, some comparisons between the students' and supervisors' experiences across the four cycles could be made.

#### Supervision and support

Long-arm supervisors met students weekly at the placement site for 1–3 hours. Students were also able to con-tact the long-arm supervisor by telephone or email in between supervision sessions to ask questions or review work.

Students were also supported by on-site supervisors who were either teachers or speech and language therapists within the school settings (see Appendix 1). Students would generally see the on-site supervisor weekly for a formal meeting (typically of around an hour), as well as informal conversations daily.

The on-site supervisors, with input from the long-arm supervisors, prioritised the classrooms and children with whom the students would initially work. All placements involved students working with at least one larger group of children (for example a class or children in the lunch hall or playground) and two or three individual children per student.

Students were placed in pairs at each placement site. This was usual practice within the participating university, as the students valued the peer support. It also enabled the university to manage student placement shortages. In addition, placing students with a peer enabled exploration of how students learned together and developed co-reasoning approaches (Rodger et al., 2007; Sevenhuysen et al., 2017).

A workbook developed by the researcher specifically as part of this study was used by the long-arm super-visors (Dancza et al., 2016). Informed by the Occupational Therapy Intervention Process Model (OTIPM) (Fisher, 2009), this workbook was intended to complement the long-arm supervision and help the students utilise occupation-centred theories to guide their placement practice. It has subsequently been published as a placement textbook (Dancza and Rodger, 2018). Following the workbook guidance, students spent the first few weeks understanding the school context, prioritising occupational needs with the teachers, performing detailed observations and implementing occupational performance analyses of the prioritised areas, documenting findings, goal-setting and interpreting potential causes of the challenges observed. Designing and delivering interventions and evaluating the outcomes generally occurred in the second half of the placement.

#### Dual role of researcher and supervisor

The first author acted as both researcher and long-arm supervisor. The closeness of the researcher to the students and supervisors and potential for influence could have biased the interview responses as participants may have wanted to report only positive aspects of their placement experiences. To mitigate this potential bias and promote balance, fairness and completeness Patton (2015) established techniques to assist insider research were utilised (Greene, 2014). For example, reflective strategies such as keeping field notes and regular discussions with research advisors were employed (Lincoln and Guba, 1985). Moreover, through the triangulation of information, reflective writing and regular discussions with the research advisors, the first author was attentive to, and conscious of, personal perspectives, and the presence of power relationships and orientations (Smyth and Holian, 2008). To minimise the power differential, students were interviewed in pairs and in the familiar university environment.

There were benefits to the dual supervisor and researcher role. Through this 'insider' perspective, the first author was accepted by participants as a part of the community and this provided a level of trust and openness in the research interviews (Dwyer and Buckle, 2009). It also afforded the first author a detailed understanding of the context being studied, so relevant changes could be made to teaching practices through the action research approach utilised (Patton, 2015). The closeness to the participants promoted an understanding of their experiences, which enhanced the trustworthiness and authenticity of the research (Bonner and Tolhurst, 2002; Greene, 2014).

## Data collection and analysis

Data were collected through semi-structured interviews (lasting between 25 and 145 minutes), reflective field notes and document analysis, as indicated in Table 1. Interviews were designed to elicit information on student learning and overall experiences from students, long-arm supervisors and on-site supervisors (see Appendix 2). All interviews were conducted at the university campus (for students and long-arm supervisors) or the placement site (for on-site supervisors), audio-recorded and transcribed verbatim by the first author.

Template analysis (TA) (King, 2004), a procedure for thematically analysing qualitative data, was used in this study. For a detailed description of the data analysis methods, see Dancza and colleagues (2016). Member checks were not used to confirm the interpretations made by the researcher. Sandelowski (2002) suggests that member checks do not necessarily comment on the trustworthiness of the research process; rather, they ask participants to comment on a new phenomenon: that of the researcher's interpretations. While the student participants involved in the research did not specifically comment on the research interpretations, contact between the researcher and long-arm supervisors continued during data analysis and informal checking occurred during this time. In addition, due to the nature of action research, interpretations from previous student and supervisor data influenced subsequent cycles and were hence able to be checked iteratively with the next students and supervisors.

Table 1. Data sources, collection method and timing.

Data source	Collection method	Time collected	Quantity
Students, x14	Semi-structured	Pre-placement (1–2	7 interviews
	interview in	weeks prior to the	
	placement pairs	start of placement)	
		Mid-placement (Week	7 interviews
		5)	
		Post-placement (1–2	7 interviews
		weeks after the	
		end of placement)	
	Individual written	Weekly throughout	Total 242 documents
	reflections	the placement	
	Supervision logs	Weekly throughout	Total 107 documents
		the placement	
	Individual student-	Weekly updates	Total 80 learning
	initiated learning	throughout the	objectives
	objectives	placement	
On-site supervisors,	Semi-structured	Post-placement	7 interviews
х5	interview		
Long-arm supervisors,	Semi-structured	Post-placement	4 interviews
х3	interview		
Researcher/long-arm	Reflective field notes	Weekly throughout	Total 74 documents
supervisor, x1		the placement	

# **Findings**

Three main themes relating to student learning during the placement were evident in the data. The first theme contrasted learning that students experienced in an environment where they did not have established procedures and personnel to follow in comparison to their previous role-established placements. The second theme explored how students navigated the theory—practice gap in the school setting. The third and final theme related to how students' intra- and interpersonal qualities affected their learning and peer working relationship. Within the results, multiple quotes

are provided to illustrate the perspectives of the student, the long-arm supervisor and the on-site supervisor.

#### Learning without established procedures to follow

The fundamental structure of the role-emerging placement, where there were no established occupational therapy procedures to follow or occupational therapy supervisors from which to model practice, meant that students needed to think for themselves to determine what to do. Students reflected that in their previous placements they had followed established practices that limited the need for them to think outside the box.

I realise how much you get into a routine [in an established occupational therapy setting] and you don't necessarily always think. Whereas in this placement there isn't a set way of doing things and you have to be constantly thinking off the top of your head. I think in a traditional placement you don't have to do that so much. You have to justify more what you're doing here. (Student 1, mid-placement)

Long-arm supervisors noted that a consequence of their previous placement experiences was that students mirrored the practice of previous occupational therapy supervisors. Whilst this may have been appropriate to their novice status, long-arm supervisors felt that under-taking procedures without understanding the rationale behind their actions had limited the students' depth of learning.

On previous placements the students were just told what to do and they just did it without thinking about it. In this last supervision they were saying things like, 'when I look back on my last placement, I realised that it wasn't very occupation-based, but at the time I didn't realise that'. (Long-arm supervisor 2)

The long-arm supervisor was vital in encouraging student learning and guiding their practice by introducing structures and procedures (such as the workbook) to support the occupational therapy process. Students reflected surprise that learning was the primary focus of these supervisory discussions.

Supervision with the long-arm supervisor has made me really think deeply. Because in previous placements my supervision was just half an hour and it was about documentation and the timing of things. (Student 8, end of placement)

\*\*\*

We spent supervision time unpacking, exploring and acknowledging the progress they made and where the difficulties were and what they needed to do differently. (Long-arm supervisor 1)

Even with some procedures provided by the long-arm supervisor for students to follow, the thinking and learning required before students could enact their practice still involved a significant amount of time. Finding the balance between contributing to the school and allowing the students to work through the learning process was a constant tension expressed by students and long-arm supervisors throughout the placements.

I think at times they forgot we were students and thought we were qualified, and then there was a level of expectation. How come we only worked with a few children over that 10-week placement? So that was a slightly difficult conversation, but I think we allowed them to understand that we are here for learning experiences as well as trying to positively influence practice in the school. (Student 9, end of placement)

\*\*\*

I thought they would probably see more children than they ended up seeing in the time that they were here. But obviously the depth that they went into was far greater perhaps than I had anticipated. (On-site supervisor 4)

\*\*\*

I think the school staff's expectations of the students are too high; they want a specialist occupational therapist who can come in and fix things quickly, which is not what they're getting, and I had some discussions with them about that. So that's difficult for the students because they feel like they are battling against what the staff want. (Long-arm supervisor 2)

#### Learning to use theory to guide practice

Students described that they were guided by the work-book and long-arm supervisor to use theory and reasoning to guide their practice. The necessity of using theory to prospectively guide students in what to do helped them to make sense of theory, rather than just applying theory intermittently as they had experienced in previous placements.

The other thing I found different from previous placements is using theory in practice. In previous placements I had used a couple of practice models, but it wasn't followed throughout the placement. During this placement I felt that I used OTIPM throughout the

placement. I think I am more familiar now than before and more confident in occupational therapy with the help of the OTIPM. (Student 8, end of placement)

The lack of emphasis and disjointed application of theory within previous placements influenced how students attempted to use theory to inform their practice in this placement. Some students disclosed a superficial understanding after their previous placements of how different theoretical frameworks could inform their practice.

I think previously I have tried to fit theory into practice, so like I am going to use the MOHO [Model of Human Occupation] for this person, so force it. When I have written reflections in the past, I have tried to force the theory into my reflections. (Student 10, end of placement)

In contrast, within the role-emerging placements the long-arm supervisors observed that the emphasis on using theory to guide practice was beneficial to students' learning as it helped them to recognise their knowledge gaps by following the occupational therapy process. The integration of theory to inform practice plans, however, takes time, which potentially contributed to the tension the students reported regarding the time required to reach a stage of service provision to the school.

By using the OTIPM to structure the approach of students, it puts the brakes on. I think that too often in placements they see a very fast process, and they see occupational therapists receiving data and gathering information and then implementing an intervention, and they don't see that breakdown of how you move from information to planning and intervening. (Long-arm supervisor 1)

While the time taken for learning was significant, students reflected that the explicit use of occupational therapy theory helped them to envision new ways of practising, which moved beyond what they had previously experienced.

We have really been able to work in an occupation-ally focused way and I think that is what occupation-al therapy is. I think often our identity can be, and the potential of our profession, is limited by the services and what occupational therapists do within them. And often it is not occupational therapy. It should only be titled occupational therapy when you are using occupation therapeutically; that is just so obvious now! (Student 9, end of placement)

# Student personal qualities and peer support influencing learning

At the pre- and mid-placement interviews, as well as in written reflections, students described personal qualities that they felt influenced their ability to manage the requirements and uncertainties created by the role-emerging placement. Earlier in the placement, many students tended to be critical of their own abilities, stating a lack of confidence, sensitivity to feedback, poor organisational and writing skills and a lack of flexibility. Students contrasted the impact of these personal qualities on their performance in previous placements and suggested that the supports provided by the established structure and close supervision enabled them to achieve. The structure of the role-emerging placement did not afford the same supports and at times exacerbated their issues. Some considered personal characteristics as unchangeable in this context and thus were quite passive and accepting of the resultant limitations to their work.

It is maybe something I should think about in the future. I don't know; maybe I am at the point that I have just accepted that I have a bad memory. (Student 6, end of placement)

Whilst all students reported anxieties and a lack of confidence in their skills and abilities at the mid-way point, the majority settled into the placement and felt they were able to successfully meet the challenges. At the end of the experience, however, a few students reported they felt they were not suited to the style of working required on a role-emerging placement as they found dealing with the level of autonomy, a different supervision style and a lack of established processes exhausting and unsettling.

But for me it was definitely paperwork and it wasn't that easy to find out what I needed to do, so that put me back a little bit. But that was nobody else's fault, I am not blaming anyone, it is just me and I just think the role-emerging placement didn't suit me. I know that I have got through it, but it was so much of a struggle. (Student 11, end of placement)

Students who did struggle identified that closer supervision, clearer structures and less autonomy than was possible on a role-emerging placement were necessary to support their learning.

For me personally I think I much prefer having some-body with me; someone to guide me. I think I really miss that actually. We were just thinking today about how much we have to explain because our practice educator hadn't seen what we've done, and I find it really difficult to explain to somebody that hasn't seen it, in words, expressing the meaning. (Student 4, end of placement)

Some students found the peer support a mediating factor to some of the challenges associated with role-emerging placements. Many positive aspects were described, such as offering additional feedback when the supervisor was not present, sharing the opportunities and challenges of working in an unfamiliar setting, and the opportunity to rehearse and clarify their ideas in preparation for supervision.

Peer supervision was great as well; being able to share our journey and how we were feeling.

And if one of us was feeling low then the other one was able to pick you up. I think to be honest you actually do need two students. (Student 4, end of placement)

\*\*\*

We were often reassuring each other that something was good enough. So, it is good to have two students there to support each other as it helps to rationalise what we're doing rather than second guessing ourselves and thinking that we need to talk to our long-arm supervisor before we do anything. (Student 2, end of placement)

All students did, however, describe some challenges associated with working with a peer. Students tended to underplay these challenges during the research inter-views (conducted in student pairs) but highlighted them more during individual supervision sessions and when writing their individual reflective accounts.

But if I am absolutely honest it has probably been working with another student who has a completely different learning way to me [which has been most challenging]. I think it is really important to have that peer support, but there needs to be a balance where I am able to have time for myself and my learning needs as well as supporting somebody else but at times it has been a bit overwhelming. I can't do it all. (Student 2, mid-placement)

\*\*\*

One student was incredibly organised, and one wasn't organised. One of them was very driven and got on with it and got quite frustrated by how the other student was working so then she just carried on by her-self, even when one of the projects was meant to be joint. (Long-arm supervisor 3)

# Discussion and implications

In a role-emerging placement, students enter a complex learning environment where there is no established role or on-site occupational therapist to ease their path into the setting and closely monitor their learning needs. While role-emerging placements enable students to learn how to enact their profession, they need to navigate the expectations of the host organisation at the same time as ensuring their own learning needs are met. Learning opportunities are different to role-established placements as there are no pre-existing occupational therapy procedures or personnel to follow, so students need to think for themselves and draw from theory to guide their practice. Personal qualities impact on the students' learning as they need to rely on their own knowledge and skills to decide what to do. Having a peer on placement can provide emotional support, but it may also present challenges for students in learning to work together.

The lack of established occupational therapy procedures and role models in the school setting meant that the students had to rely on theory and their own reasoning, which was a different emphasis to previous placements. These differences may be partly explained by the shift in balance between the types of knowledge students used and created during the role-emerging placement. Billett (2010: 102) described the knowledge required for being a professional in three categories: 'domain-specific procedural knowledge'; 'domain-specific conceptual knowledge'; and 'dispositional knowledge'. These can be explained as follows.

- Domain-specific procedural knowledge is the processes and procedures required for
  practice. Within occupational therapy this might be assessment procedures, documentation
  formats and standard practices for intervention (such as provision of assistive equipment).
- 2. **Domain-specific conceptual knowledge** is the facts, concepts and theories associated with the profession. Examples include occupational therapy models and frames of reference.
- 3. **Dispositional knowledge** is the values and attitudes of the learner. Examples include the students' attitudes towards learning and how they use reflection and criticality to enhance their practice.

Students begin a role-established or role-emerging placement with similar access to dispositional and occupational therapy conceptual knowledge, as it largely comes from university teaching and students' previous experiences.

The availability of occupational therapy procedural knowledge, however, differs between role-established and role-emerging placements. Students described learning on their previous placements as focused on procedural knowledge, which they acquired in the setting through

following established procedures and modelling their behaviour on an occupational therapy supervisor. This is consistent with the description by Hutchings and Jarvis (2012) regarding how learning often occurs through observing others, being guided and having practice demonstrated. Little time on previous placements was reportedly given to critically appraising what they were doing (dispositional knowledge) or using theory to guide practice (occupational therapy conceptual knowledge), perhaps because of the significant time required to do this, which may not have been prioritised within the typical demands of role-established settings.

The knowledge balance shifted for students during the role-emerging placement. The procedural knowledge that was most heavily relied on in previous placements was largely not accessible to students (except through the guidance in the workbook and during supervision with the long-arm supervisor). It was therefore necessary to use occupational therapy conceptual knowledge, reflection and critical appraisal to guide and justify every part of their work. Using conceptual and dispositional knowledge, however, was more time consuming than following an established procedure, which potentially contributed to the 'trade off' required between providing a service to the school and the time required for students to consolidate their learning.

Despite the challenges, as students developed their understanding of occupational therapy concepts and practices, they experienced a transformation that changed them personally as well as their sense of professional identity, reflective of transformational learning theory (Hooper, 2008). These placements do, however, present challenges that require careful negotiation and structured guidance. For example, clarity and negotiation with the host organisation about what students can bring to the context and the time they need for learning is required.

The use of peer learning can support students' use of conceptual and dispensational knowledge and support the affective aspects associated with transformational learning. Consistent with contemporary literature (Sevenhuysen et al., 2017), however, peer learning does not just happen organically, and students need guidance on how to make the most of this opportunity and manage the associated challenges.

#### Limitations

The data were gathered over a 19-month period from a relatively small number of participants in one area in England. The findings may therefore be specific to local educational practices.

While the learning experiences of students during the placement were reflected in the results, there was no formal follow-up of students after the final interview to determine how this knowledge translated into the remainder of their degree programme or post-graduate experiences.

As both researcher and educator, the first author had the potential to influence the participants' responses. All interviews, however, contained both positive and negative comments, which indicates that participants felt comfortable sharing genuine experiences. Moreover, strategies were in place to mitigate potential bias, as reported in the methods section, and this closeness to participants enabled the researcher to gain an in-depth understanding of the student learning experiences (Bonner and Tolhurst, 2002).

# Conclusion

Student learning on role-emerging placements can be transformational. Understanding the differences in availability of professional knowledge (dispositional, conceptual and procedural knowledge) between role-established and role-emerging placements can guide supervisors to provide appropriate supports for students. Future research should focus on the exact mechanisms for providing this support to students in the most effective and efficient way.

# **Key findings**

- 1. In role-emerging placements, student learning focuses on using conceptual and dispositional knowledge to guide practice.
- 2. Procedural knowledge needs to be supplemented, and time is required for transformational learning.

# What the study has added

Role-emerging placements expect students to draw from theory and their own reasoning to guide their practice, and therefore requires structured guidance and realistic expectations for what they will achieve.

# References

Banks S, Bell E, Smits E (2000) Integration tutorials and seminars: examining the integration of academic and fieldwork learning by student occupational therapists. Canadian Journal of Occupational Therapy, 67(2), pp. 93-100.

Bartholomai S, Fitzgerald C (2007) The Collaborative Model of Fieldwork Education: implementation of the model in a regional hospital rehabilitation setting. Australian Occupational Therapy Journal, 54, pp. S23-30.

Billett S (2010) Emerging perspectives of work: Implications for university teaching and learning. In: J Higgs, D Fish, I Goulter, S Loftus, J Reid, F Trede, eds, Education for future practice. Rotterdam, The Netherlands: Sense Publishers, pp. 97-112.

Boniface G, Seymour A, Polglase T, Lawrie C, Clarke M (2012) Exploring the nature of peer and academic supervision on a role-emerging placement. British Journal of Occupational Therapy, 75(4), pp. 196-201.

Bossers A, Cook J, Polatajko HJ, Laine C (1997) Understanding the role emerging fieldwork placement. Canadian Journal of Occupational Therapy, 64(1), pp. 70-81.

Cassell C (2008) Template analysis. In: R Thorpe, R Holt, eds, The SAGE dictionary of qualitative management research. London: Sage, pp. 221-223.

Clarke C, de Visser R, Martin M, Sadlo G (2014) Role emerging placements: a useful model for occupational therapy practice education? A review of the literature. International Journal of Practice-Based Learning in Health and Social Care., 0, pp. 1-13.

Clarke C, Martin M, de Visser R, Sadlo G (2015) The development of an authentic professional identity on role-emerging placements. British Journal of Occupational Therapy, 77(5), pp. 222-229.

Cooper R, Raine R (2009) Role-emerging placements are an essential risk for the development of the occupational therapy profession: the debate. British Journal of Occupational Therapy, 72(9), pp. 416-418.

Crabtree BF, Miller WL (1999) Doing qualitative research. 2nd ed. Thousand Oaks, California: Sage Publications.

Dancza KM (2015) Structure and uncertainty: the 'just right' balance for occupational therapy student learning on role-emerging placements in schools. Doctor of Philosophy. Queensland, Australia: The University of Queensland.

Dancza KM, Copley J, Rodger S, Moran M (2016) The development of a theory-informed workbook as an additional support for students on role-emerging placements. British Journal of Occupational Therapy, 79(4), pp. 235-243.

Dancza KM, Rodger S (2018) Implementing occupation-centred practice: A practical guide for occupational therapy practice learning. Oxon, United Kingdom: Routledge.

Dancza KM, Warren A, Copley J, Moran M, Rodger S, McKay EA, Taylor A (2013) Learning experiences on role-emerging placements: An exploration from the students' perspective. Australian Occupational Therapy Journal, 60(6), pp. 427-435.

Dreyfus H, Dreyfus S (1986) Mind over machine: The power of human intuition and expertise in the era of the computer. New York: The Free Press.

Evans K, Guile D (2012) Putting different forms of knowledge to work in practice. In: J Higgs, R Barnett, S Billett, M Hutchings, F Trede, eds, Practice-based education: Perspectives and strategies. Rotterdam, The Netherlands: Sense Publishers, pp. 113-130.

Fieldhouse J, Fedden T (2009) Exploring the learning process on a role-emerging practice placement: a qualitative study. British Journal of Occupational Therapy, 72(7), pp. 302-307.

Fisher AG (2009) Occupational Therapy intervention process model: a model for planning and implementing top-down, client centred, and occupation-based interventions. Fort Collins, CO: Three Star Press.

Hooper B (2008) Stories we teach by: intersections among faculty biography, student formation, and instructional processes. American Journal of Occupational Therapy, 62(2), pp. 228-241.

Hunter H, Volkert A (2016) Issues and challenges of role-emerging placements. World Federation of Occupational Therapists Bulletin, 73(1), pp. 57-65.

Hutchings M, Jarvis P (2012) The relationship between practice, theory and research. In: J Higgs, R Barnett, S Billett, M Hutchings, F Trede, eds, Practice-based education: Perspectives and strategies. Rotterdam, The Netherlands: Sense Publishers, pp. 175-186.

King N (2004) Using templates in the thematic analysis of text. In: C Cassell, G Symon, eds, Essential guide to qualitative methods in organizational research. London: Sage, pp. 256-270.

Mezirow J (2000) Learning to think like an adult: Core concepts of transformative theory. In: J Mezirow, ed, Learning as transformation. San Francisco, CA: Jossey-Bass, pp. 3-34.

Mulholland S, Derdall M (2005) A strategy for supervising occupational therapy students at community sites. Occupational Therapy International, 12(1), pp. 28-43.

Overton A, Clark M, Thomas Y (2009) A review of non-traditional occupational therapy practice placement education: a focus on role-emerging and project placements. British Journal of Occupational Therapy, 72(7), pp. 294-301.

Patton MQ (2015) Qualitative research and evaluation methods. 4th ed. Thousand Oaks: Sage Publications.

Prigg A, Mackenzie L (2002) Project placements for undergraduate occupational therapy students: design, implementation and evaluation. Occupational Therapy International, 9(3), pp. 210-236.

QSR International (2010) NVivo qualitative data analysis software. Version 9 ed. QSR International Pty Ltd.

Rodger S, Thomas Y, Dickson D, McBryde C, Broadbridge J, Hawkins R, Edwards A (2007) Putting students to work: valuing fieldwork placements as a mechanism for recruitment and shaping the future occupational therapy workforce. Australian Occupational Therapy Journal, 54, pp. S94-7.

Rodger S, Thomas Y, Fitzgerald C, Dickson D, McBryde C, Edwards A... Hawkins R (2008) Evaluation of a collaborative project to engage occupational therapy clinicians in promoting practice placement education. British Journal of Occupational Therapy, 71(6), pp. 248-252.

Rodger S, Thomas Y, Greber C, Broadbridge J, Edwards A, Newton J, Lyons M (2014) Attributes of excellence in practice educators: The perspectives of Australian occupational therapy students.

Australian Occupational Therapy Journal, 61(3), pp. 159-167.

Thew M, Hargreaves A, Cronin-Davis J (2008) An evaluation of a role-emerging practice placement model for a full cohort of occupational therapy students. British Journal of Occupational Therapy, 71(8), pp. 348-353.

Withers C, Shann S (2008) Embracing opportunities: stepping out of the box. British Journal of Occupational Therapy, 71(3), 122-124.

# Appendix 1. Summary of participants and settings

Cycle 1	Summary or particip	8-	
Students	Student 1 and Student 2		
Setting	Primary school for		
Jetting	fostered children (aged		
	5–11 years) <sup>a</sup>		
Existing health	None in school.		
services in	Infrequent (fewer than		
setting	three times a year)		
Setting	occupational therapy		
	visits from local health		
	services for individual		
	children.		
Long-arm	Long-arm supervisor 1		
supervisor	(first author)		
On-site	On-site supervisor 1		
supervisor	(teacher)		
Cycle 2			
Students	Student 3 and Student 4	Student 5 and Student 6	
Setting	Mainstream primary	Secondary school	
_	school children	specialist	
	(aged 5–11 years)	communication unit	
		(aged 11–16 years) <sup>a</sup>	
Existing health	None in school.	On-site speech and	
services in	Infrequent (fewer than	language therapist.	
setting	three times a year)	Infrequent (fewer than	
	occupational therapy	three times a year)	
	visits from local health	occupational therapy	
	services for individual	visits from local	
	children.	health services for	
		individual children.	
Long-arm	Long-arm supervisor 1	Long-arm supervisor 2	
supervisor	(first author)	(occupational therapy	
		senior lecturer)	
On-site	On-site supervisor 2	On-site supervisor 3	
supervisor	(teacher)	(speech and	
		language therapist)	
Cycle 3			
Students	Student 7 and Student 8		
Setting	Secondary school		
	specialist		
	communication unit		
	(aged 11–16 years) <sup>a</sup>		
Existing health	On-site speech and		
services in	language therapist.		
setting	Infrequent (fewer than		
	three times a year)		
	occupational therapy		
	visits from local health		

Long-arm supervisor On-site supervisor	services for individual children  Long-arm supervisor 3 (occupational therapy senior lecturer)  On-site supervisor 3 (speech and language therapist)		
Cycle 4			
Students	Student 9 and Student 10	Student 11 and Student 12	Student 13 and Student 14
Setting	Mainstream primary school children (aged 5– 11 years)	Primary school for fostered children (aged 5–11 years) <sup>a</sup>	Specialist residential secondary school for looked-after children (aged 11–18 years)
Existing health services in setting	None in school. Infrequent (fewer than three times a year) occupational therapy visits from local health services for individual children.	None in school. Infrequent (fewer than three times a year) occupational therapy visits from local health services for individual children.	On-site psychologist and regular access to social workers and speech and language therapists. Infrequent (fewer than three times a year) occupational therapy visits from local health services for individual children.
Long-arm supervisor	Long-arm supervisor 1 (first author)	Long-arm supervisor 4 (occupational therapy senior lecturer)	Long-arm supervisor 2 (occupational therapy senior lecturer)
On-site supervisor	On-site supervisor 4 (teacher)	On-site supervisor 1 (teacher)	On-site supervisor 5 (teacher)

<sup>&</sup>lt;sup>a</sup> Setting used twice in this study.

# Appendix 2. Overview of the interview topics.

# Pre-placement interview – occupational therapy students

- How might you see the role of the occupational therapist in this school?
- In the past, what has helped your learning while you were on placement (for example strategies/techniques)?
- What hasn't been so helpful to your learning?
- Think back to your previous placements and the goals you have had for your learning; what do you think you need to continue to work on in this placement?
- What are your initial impressions of the workbook?
- Have you used any theory on previous placements? Can you describe which ones and how you used this?

# Mid-placement interview – occupational therapy students

- What experiences stand out for you?
- How do you currently see the role of the occupational therapist in this school?
- Do you have any comments so far about your supervision sessions (on-site and long-arm)?
- How are you using the workbook?
- Is your approach different from the other staff in the school? How?
- How are you using theory on this placement?
- What has supported your learning?
- What has been challenging for you about this?
- How are your finding working with a peer?

#### Post-placement interview – occupational therapy students

- What have been the highlights for you during this placement?
- What have been the challenges for you during this placement?
- Were the expectations of the school staff different from what you expected?
- How do you see the role of the occupational therapist in this school?
- What do you think has most helped you learn or progress on this placement?
- Do you recall any key learning moments you had? What occurred? What factors do you think influenced this?
- How have you used theory on this placement?
- Which model(s) have you found useful to guide your practice? Why?
- What other skills have you developed or refined through this placement?
- What do you think you will use when you graduate?

- What do you think about how you were supervised (on-site and long-arm)?
- How did you use the workbook?
- How have you found working with a peer?

#### Post-placement interview guide – long-arm supervisor

- Tell me about your previous experiences of long-arm supervising in role-emerging placements. How does this recent placement compare with your previous experiences?
- What have been the highlights for you during this placement?
- What have been the challenges for you in this placement?
- Have you developed any new insights as a result of this experience (personally/professionally)?
- What do you think has most helped the students learn or progress in this placement?
- Do you recall any key learning moments the students had? What occurred? What factors do you think influenced this?
- How did you use the workbook with your students?
- What other resources did you use to support the students?
- What have you found that may have challenged how the students implemented occupationcentred practice in the school?
- What have you found that has supported the students implementing occupation-centred practice in the school?
- What are your thoughts about students working with a peer on placement?

#### Post-placement interview – on-site supervisor

- Tell me about the projects the students undertook in the school. What have been the highlights for you during this placement?
- What have been the challenges for you in this placement?
- What was your involvement with the occupational therapy students?
- What do you think about the support you were given?
- Have you developed any new insights as a result of this experience (personally/professionally)?
- What might you do differently as a result of these new insights?
- Have you had any feedback from staff or children about the occupational therapy placement?

- Has this experience of occupational therapy been similar to or different from your previous experiences of occupational therapy involvement? (In what way has this been similar/different?) Do you see a role for occupational therapy in this school?
- What areas would you like to see developed in the future if you had an occupational therapist or new occupational therapy students?
- What do you think has most helped the students on this placement?
- What do you think were the challenges to the students on this placement?
- Is there anything you would like to suggest future students prepare before starting this placement?