

From work-integrated learning to virtual case studies: Navigating an alternative to fieldwork in paediatric occupational therapy

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Why the need for innovation?

Work-integrated learning (WIL) is a crucial component of learning in the undergraduate occupational therapy (OT) programme. WIL provides essential work exposure, allows for theory-practice integration and forms part of the 1 000 clinical hours required by the Health Professions Council of South Africa (HPCSA), in order for graduates to be registered as occupational therapists.

In March 2020, with the implementation of COVID-19 restrictions, OT training – characterised by regular face-to-face contact between lecturers, students and service users – had to transform rapidly to virtual contact sessions. Although the HPCSA adapted regulations to allow for alternatives to traditional WIL, navigating the transformation to alternative clinical learning activities was challenging for teaching staff. Lecturers were concerned about whether they would be able to guide students to reach the learning outcomes of the curriculum.

The World Federation of Occupational Therapy suggested case studies as an alternative to fieldwork.^[1] Although case study presentations are authentic in content, they have the limitation that they may be more difficult for students to conceptualise than face-to-face interactions. Furthermore, case studies do not allow students the opportunity to gain hands-on experience. However, recent research strongly supports the appropriate use of case-studies,^[2,3] and the decision was made to adopt virtual case studies as part of a polysynchronous approach^[4] to present students with alternatives to WIL. The challenge was to incorporate case studies in such a way that the authentic learning experience for the students was enhanced, as face-to-face interaction with service users was prohibited because of COVID-19 restrictions.

What was implemented?

Six experts in different fields of paediatric OT were invited to virtually present a case study on Google Meet. Experts were selected from diverse contexts (e.g. rural clinic, urban private school, special school) and the service users in the case studies had different conditions as discussed in the curriculum (e.g. severe disability, autism spectrum disorder, sensory integration dysfunction). Online, synchronised presentations occurred once a week over six weeks. Experts were provided with detailed guidelines to structure their presentations. The experts gave the medical history (including clinical information), as well as a description of influencing environmental and ethical factors. Experts were requested to include photographs of the service user's environment, their available equipment and resources, as well as photographs of the service user (provided informed consent was obtained). Furthermore, experts shared their own selection of assessments and interventions implemented for this case. The expert then referred the case to the students who had to deliberate and collaborate in their small groups to complete: (i) a professional reasoning

tool; and (ii) their intervention plan and first intervention session. Professional reasoning in OT is the process used by practitioners 'to plan, direct, perform, and reflect on client care'.^[5] Therefore, students were guided to integrate prior knowledge and new information relevant to the case within the professional reasoning tool. The students then used this information to produce the intervention plan and their first intervention session. Emphasis was placed on prioritising intervention outcomes with consideration of the service user's context, as this is a priority – particularly in resource-limited contexts.^[6,7] The module co-ordinator visited the groups in their break-out 'rooms' throughout the day to provide guidance.

During the next virtual session, one group had the opportunity to present their completed professional reasoning tool as well as intervention plan and intervention session to the class. The presentations were informal yet structured to allow for discussion and reflection between lecturers and students. Students received constructive, formative feedback, as the intent was to facilitate interaction, discussion and debate regarding issues pertaining to the case. After the completion of each presentation, all students were required to complete a guided reflection on their own learning.

Individual assessment was in the format of a portfolio of evidence, containing (per case) the student's completed professional reasoning tool, intervention plan and intervention session, together with his/her own guided reflection.

A rubric guided the allocation of marks for the portfolio. The rubric focused on the individual student's ability to: (i) write and edit documentation in a professional manner; (ii) compile a comprehensive portfolio (i.e. did he/she complete all the activities?); (iii) reflect deeply on the case studies; (iv) identify and specify a variety of suitable resources appropriate to the case studies; and (v) evaluate the intervention plans.

What have we learnt?

Several lessons were learnt though the implementation of this approach. These will be supplemented with quotations from student feedback (shared with permission).

Firstly, students gained experience and professional reasoning skills to plan the intervention process for six extremely diverse clients. Within typical clinical placements, this would not be possible as specific practice settings tend to provide services to children with similar diagnoses or impairments, often from one particular context. Although the students were unable to execute their intervention plans with the service users, the exposure and experience gained by students far exceeded lecturers' expectations.

One student wrote in her feedback:

'I value the variety of cases we did. Which we would not necessarily had gotten in a practical fieldwork.'

An additional benefit of the approach was that it enabled various experienced occupational therapists (lecturers and experts) to collaborate in facilitating learning for the students. The clinical subject matter experts synthesised information from different practice areas of the curriculum into the one case study each presented. Students received valuable information from the expert presenter to visualise the complexity of the case and approach it as if they were shadowing the expert. Students were therefore required to link different areas of practice when planning intervention.

Students commented in their feedback:

'I enjoyed doing all the different cases and seeing a broader perspective on the different areas of paediatric OT. Seeing the different diagnoses and how the therapists treating those children intervened in each case was really insightful and I think we'll always remember these cases.'

'I enjoyed the case studies as it changed the theory into a practical component.'

'I valued that experienced lecturers from different fields presented these cases to us.'

'I valued that the cases were presented so comprehensively to us.'

The group work ensured that the learning activity could be taken full circle to a final product that could be presented to the class. Students discussed and debated issues pertaining to the case within their groups and had to agree on a collective approach. The students' interactions allowed for critical reflection and inductive and deductive reasoning.^[8] These processes became evident during the presentation sessions, as the students were able to interact and produce substantive counterarguments to comments from lecturers and peers, as they had truly engaged with the material.

Furthermore, to complete the reflective questionnaire after every case, students had to reflect individually on their own growth. From the quality of reflections received as part of the portfolio, lecturers identified that students found this activity challenging, although some could identify the value of this practice.

One student observed:

'It was really insightful to reflect on the different cases for the portfolio. It helped me realise what I learnt in the module.'

Students seemed to value the repetitiveness and familiarity of the consistent teaching and learning process used every week. As the weekly expectations and process remained the same, the students could focus on the complexities of each case study. Lecturers could observe the increase in confidence and competence in the students every week. Furthermore, students showed a deep appreciation for this new and unconventional approach to teaching, acknowledging the added benefit to their own growth, development and learning. Two students commented:

'I valued all the effort the lecturers made to provide us with a rich education during the online learning period.'

'Even if the third-years of 2021 go back to normal practicals, I would encourage you to try and incorporate the 6 different cases that we did into their year, because that was definitely where I learnt the most.'

What will we keep in our practice to continue improving our student training?

As the use of case studies with clinical subject matter experts proved to be a valuable learning experience for the students, we will continue to use the concept in our training, even in the post-pandemic context.

As students will possibly be able to return to (limited) fieldwork placements in the near future, we plan to repurpose these case studies and incorporate them into the skills mix, giving students the best of both worlds.

The assessment rubric will be refined and validated to make the assessment criteria more explicit and easier to interpret. Students found it difficult to comprehend that assessment would not focus exclusively on their 'actual product', but rather on their metacognition and reflection on their learning during the process. This shift in focus should be incorporated throughout the curriculum.

Because many students found reflection a valuable, albeit difficult and abstract, concept to master, we will introduce guided reflection from the onset – supporting students in developing this essential skill.

Although COVID-19 has caused many a sleepless night for lecturers in the health sciences, adapting our approaches to teaching and assessment has radically expanded our horizons. This experience will infuse our teaching with new ways of guiding our students to face the challenges of service provision in the 21st century.

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Evidence of innovation



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