Using Video Technology for Skills Development in the Health Professions

Grants for Instructional Technology Innovation in Teaching are awarded twice annually at Dalhousie University through the Office of Instructional Development and Technology. The grants support faculty who are seeking to incorporate technology in their classroom and laboratory practice in ways that provide direct instructional benefit to students. A significant concern for instructors of on-line health professions courses is to provide their students with opportunities to observe and practice the skills they need to care for their clients. In this edition of Focus, two grant winners from the Faculty of Health Professions describe video projects that enhance skill development in the on-line learning environment.

Creating a Living Demonstration Library for Student Therapists

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Have you ever thought about how many skills you need in order to get out of bed, take a shower, and get dressed in the morning? There are several layers of physical, sensory, and cognitive skills that are required to complete our routine activities. Now imagine how you would do these same activities every morning if you experienced a stroke and one side of your body no longer responded, your vision were altered, and you had to think through every single step of the routine and the corresponding movement. As an occupational therapist (O.T.), my primary role is to enable an individual (a “client”) to return to the best possible level of function for all the activities he or she wants and needs to do in life. As a Lecturer in the School of Occupational Therapy, my role is to help students learn to see all the variables that work in concert to create a person’s functional abilities.

Activities (“occupations”) can be categorized simply into areas of self-care (looking after yourself), productivity (paid or unpaid work), and leisure. They can also be seen as any task that has been given meaning by the individual. Thus, occupational therapists are challenged to assist clients’ functional development in a broad and diverse range of occupations and contexts. Student O.T.s often are challenged to “speed up their eyes” and observe which key factors need to be addressed and prioritized with a client to improve their function. There are multiple variables to observe simultaneously, and this is the challenge for the student therapist.
To teach observation skills and to enhance students’ skill development, I have begun creating a library of client video-vignettes with the support of an OIDT Grant for Instructional Technology Innovation in Teaching (project title: “A Demonstration Library of Occupational Performance”).

Selected video vignettes which demonstrate key components of therapeutic applications have been made available to students on a WebCT site, allowing repeated access for viewing techniques outside the classroom. The first video-clips show an experienced O.T. working with two different clients (who have each experienced a stroke) in the course of their rehabilitation journey and who were filmed on-site at the QEII Health Sciences Center (N.S. Rehabilitation Hospital). To date, they have focused on basic mobility skills (e.g., transfers from bed to wheelchair, to toilet, to tub).

I teach therapy from the perspective that everything we do in life is structured like an onion. Contributing to an individual’s structure and function are multiple layers that are not evident from the initial survey of the exterior form. Every layer reveals new clinical information that can either expand the challenge faced by O.T.s, or deepen their understanding. Once you start to peel, things are often not what they appear on initial survey. The key to using the WebCT videos is to analyze why, and how, the client completes a skill. Repeated viewing of multiple video clips from different angles and views allows the disentangling of contributing layers.

The videos are used in the classroom, are posted on WebCT to make the didactic lecture material come alive, and provide novel observation for exam purposes. For example, we talked about transfers during lecture, we practiced them in the lab, the transfer video-vignettes were posted on WebCT, and then the students were given a practical examination of their transfer skills. The videos were an invaluable part of the continuum and served as an extension of the lab when students were studying on their own. As the skill level of the student advances, the same clips are used, but now with added levels of analysis expected from the student: they are to peel the next layer away and continually look for other clues on how best to work with the client to enhance function to the best possible level.

The students have had a very positive response to the use of the video clips within the classroom and on WebCT. In their own words:

• “It was interesting to be able to view the transfers from various angles, angles we often can’t see when reading and viewing from a textbook.”

• “Regardless of how much we discuss, observe, and practice handling and transfer techniques with classmates it is difficult to observe movement and positioning in a classmate who does not have the disability, but is attempting to demonstrate it. By viewing the clips we can relate the knowledge and skills we have gained in the classroom to the client in the clinical setting.”

• “I know, for me, I observe something new each time I view a clip.”

I would like to acknowledge several people who assisted me with this project: the clients who gladly shared a part of their rehabilitation journey; Lindsey Delgato and Cher Smith, Occupational Therapists at the QEII Health Sciences Centre; Findlay Muir and Roger Brush of OIDT’s Instructional Media Services who patiently filmed and edited the original clips; Vivien Hannon who prepared the clips for the streaming server; Sally Alshazly from Academic Computing Services for her continuous patience and assistance helping me make the links work; and, of course, OIDT for granting the funds to make it possible. Thank you to all.
Demonstrating Family Interventions in Social Work: 
Development of Video Resources for On-line Course Delivery

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The Maritime School of Social Work (MSSW) has launched national programs that are offered almost fully on-line: Bachelor of Social Work (BSW) and Masters of Social Work (MSW). However, transforming classroom-based exercises that teach clinical skills into web-based instruction poses significant challenges. It is generally accepted that much of the interaction that takes place during clinical sessions occurs non-verbally or through implicit verbal cues. When learning through classroom instruction how to intervene with high-risk individuals and families, students are given the opportunity to both see and practice what they learn. While assignments and exercises can help online students to apply theory to practice, missing from web instruction is the opportunity to observe live demonstrations, including role plays and other classroom exercises in which experienced professionals, such as their instructor and other invited guests, conduct therapeutic interventions.

Video re-creations of classroom role plays are one way that on-line students can see clinical techniques, making concrete the link between theory and practice. This project successfully piloted the development of video resources used to teach intervention skills with families and their individual members. These resources are now also available for on-site instruction.

From Role Plays to On-line Learning
Four student actors with stage experience and two child actors participated in improvisational theatre that imitated the interaction of families in crisis. Actors were provided with a detailed case history to help them add depth and reality to their roles. The course instructor assumed the role of the social worker and family therapist in much the same way that role plays are conducted during on-site instruction. A day of taping was sufficient to capture almost 30 short vignettes ranging from 2-10 minutes in length.

Each vignette shows different phases of intervention in work with families. These segments are being shared with students through the distribution of compact discs sent with other course materials. While the vignettes may also be made available on WebCT through a streaming video server, providing the material on CD’s provides an easier and more reliable way for students to review the demonstrations as often as they like.

We intend to share our instructional clinical materials. As part of this project, the instructor has made contact internationally with similar programs offering on-line counseling courses and with organizations that produce resources for family therapists. These include Dr. Victor Minichiello and Dr. Brian Sullivan (University of New England in Australia) who offer a distance Masters in Counseling Program across Australasia, and the distributors of video resources for the American Association for Marriage and Family Therapy. These demonstration materials have also been successfully used in community presentations as part of the MSSW’s continuing education program.

Benefits Locally, Nationally, and Internationally
Students in Bachelor and Master’s level on-line courses, as well as community-based practitioners, will continue to benefit directly from the opportunity to
see the application of intervention theory to direct practice. The combined web and CD delivery allows for self-directed learning. Students in on-site courses are able to deepen their understanding of course content as well.

We hope that this will be the first of many attempts to broaden the MSSW’s use of multimedia resources in the delivery of our national distance courses. The pilot is currently being examined for its practicality and to identify challenges that come with developing the School’s own on-line video resources. Sharing of the materials with all faculty in the department is expected to stimulate discussion and further innovation. Through conference presentations we plan to share with colleagues nationally the School’s experience developing these resources.

New Books in the OIDT Library


The inclusion of these materials in web-based instruction is addressing the need of distance students to see the actual process of counseling in action. While these vignettes provide only one instructor’s interpretation of the clinical relationship, it is nonetheless a valuable resource for students to begin to critically examine their own way of engaging therapeutically with others.