OEFD Notes

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LOOKING BACK-LOOKING FORWARD

by Joanne Hamilton

The end of the academic year is often a time of reflection. We look back at our year and reflect upon what went well , what didn't go well, and the many reasons that may explain our performance. Looking back at the work of OEFD over the last year, we have a lot to be proud of.. We delivered a full faculty development program, both on the Bannatyne Campus and throughout Manitoba. We supported the development of online courses in a number of programs,. We worked with faculty members to develop new courses and revise existing ones. We assisted in the development , implementation, and delivery of program evaluation frameworks. We continue to grow in our new role supporting all five colleges in the Rady Faculty of Health Sciences.

However, through our reflection we also identified areas in which we need improvement. For example, we need to do a better job of supporting our distributed and community-based faculty members, particularly our clinical teachers We also need to improve our communication across the Rady Faculty, to ensure faculty members are aware of our services and feel that they are supported in all their academic roles.

In addition, there are areas in which we need to develop and expand or enhance what we do. There is a need for a more reflexive process for providing feedback to teachers regarding their teaching. One of the areas we are working on is the development of a peer observation of teaching process, as a way to provide meaningful feedback to faculty members about teaching in a safe and respectful manner. We also wish to share more of our work through research and publication, whether from our own projects or those in partnership with faculty members from the five colleges.

Looking forward, we will use what we have learned from our reflexive exercise to continue to grow and improve. We hope to fulfil our mission of being a resource for promoting excellence in teaching and scholarship across the continua of health professions education. Through evidence-informed practice, Office members engage in and support curriculum development and innovation; educational research and program evaluation; and faculty development activities that assist faculty members in their roles as educators, researchers and administrators.

Rady Faculty of Health Sciences | University of Manitoba

THE POWER OF REFLECTION

by Joanne Hamilton

Reflective practice is probably the most important activity we engage in for assessing and identifying the limits of our own skills and for addressing these limits through professional development (Eva & Regehr, 2011). However, the ability to self-assess through reflection is not well developed for most of us (Eva & Regehr, 2005). To be effective, reflection needs to be purposeful, relevant to our practice, and include a number of sources of information (not just our own impressions!).

WHY REFLECT?

Reflection is a process of interpreting one's own performance and comparing it to an explicit or implicit standard (Sargeant et al., 2008). Developing the ability to reflect allows you to realistically assess your own knowledge, skills and behaviours to guide your own professional development and measure your progress in achieving your personal goals. Although there is general agreement about the need for reflection, there is less direction on how to reflect.

HOW TO REFLECT?

Two models of reflection are particularly useful for building skills in reflection. The first, developed by Donald Schön (1987) from his work on reflective practitioners, identifies contexts for reflection before, during, and after an event as a way to ensure ongoing competency and provide motivation for learning. The three contexts are as follows:

Reflection – for – Action: This is the process of thinking about what you need to do in preparation for an activity, for example a particular patient visit, a procedure, or teaching session. It includes reflecting on your own knowledge and preparation for the activity, and what you need to do further to get ready, as well as anticipating issues that may arise and preparing for them.

> To be effective, reflection needs to be purposeful, relevant to our practice, and include a number of sources of information.

Reflection – in – Action: This is the process of thinking about what you are doing while you are doing it and making adjustments to help ensure things are successful. It often happens quickly, for example, you see by the expression on your patient's' face that they do not understand your question, so you quickly rephrase the question in your mind and ask again. Questions that arise when reflecting in action may be: What is really happening with this patient? What is worrying? What can I conclude about the patient's situation? The patient doesn't seem to be responding well to what I am doing—how can I change it up?

Reflection – on – Action: This is the process of thinking about an experience after it has concluded. Questions that may arise when reflecting on action may be: What went well and what didn't go as well? What do I need to change/learn as a result of that experience? What was I trying to achieve, and did I achieve it? How successful was it? Could I deal with the situation differently?

The second model for reflection comes from the work of Driscoll (1994) called the What? Model. Driscoll provides trigger questions that can help us think about an experience and develop a plan for improved practice. Driscoll's

model applies well to situations where we are reflecting on practice or for practice. Driscoll's model also asks three questions:

What? *A description of the experience*. What exactly happened? What did you see? What did you do? What was your reaction? What did other people do? (e.g. colleague, patient, family). What do you see as key issues of this experience?

So What? *An analysis - how did it affect you and others?* So what were you feeling at the time? Now? Any differences? Why? So what were the results of what you did or did not do? (good or bad, for patients, colleagues). So what still concerns you? So what were your experiences in comparison to your colleagues, etc.?

Now what? *What actions do you need to take?* Now what needs to happen to improve? Now what are you going to do about the situation? Now what might you do differently with a similar situation? Now what knowledge or skills do you need to develop or improve?

Practice using Driscoll's Model by thinking of a recent clinical or teaching encounter you had (or witnessed) that caused you concern or surprise (use the worksheet on the next page). Use the model and its prompts flexibly, rather than as a directive framework. Our own experiences are the most powerful motivator for driving our learning and improvement. Finally, discussing your reflection with others can help provide guidance and feedback on performance. For example, discussing a negative experience with a patient, a mentor or other colleague can help identify areas that you may have been unaware of that could have influenced the interactions.

SOURCES OF DATA FOR REFLECTION

Other sources of information can be useful in self-assessment and reflection. Don't forget to include things like learner and patient feedback, health records (including your own audits), and feedback from colleagues and supervisors, where appropriate. These can also be powerful sources of information for guiding learning, and in the case of electronic health records and billing data, can provide some fairly objective data regarding performance compared to standards and accepted norms. Data can be incredibly useful for your reflection and self-assessment, whether in the form of number or narratives (Lockyer et al., 2011). As more and more health professional practices and hospitals embrace electronic patient records, accessing patient data has become easier. Table 1 provides some ideas for sources of information for reflection, both on clinical practice and teaching. Can you think of other sources of information you might include?

> Reflection bridges the gap between how we would like to practice and what we actually do (Driscoll, 1994)

Reflective practice is an intentional activity aimed at analyzing actions, assessing effectiveness and making plans for improvement. It is a way for health professionals to expose tacit knowledge and bridge the gap between how we would like to practice and what we actually do and, thus, make sense of complex practice (Driscoll, 1994). Most importantly, it reminds us that learning is a lifelong process.

THE POWER OF REFLECTION (CONTINUED)

References

Driscoll J (1994) Reflective practice for practise – a framework of structured reflection for clinical areas. *Senior Nurse 14*(1): 47–50.

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Sargeant, J. M., Mann, K. V., Van der Vleuten, C. P., & Metsemakers, J. F. (2009). Reflection: a link between receiving and using assessment feedback. *Advances in health sciences education*, *14*(3), 399-410.

Our own experiences are the most powerful motivator for driving our learning and improvement.

REFLECTIVE PRACTICE WORKSHEET

What? (Description of the incident)

So What? (What are the consequences/meaning/significance?)

Now What? (What actions will you take?)

Adapted from Driscoll (1994).

THE POWER OF REFLECTION (CONTINUED)

Table 1. Example Sources of Data for Reflection for Clinician Teachers

Source	Type	Nature	Questions to Consider in self assessment
Patient	Informal	Comments and concerns raised by patients Patients responses to discussions and plans Patient non-verbal feedback Adherence to plans	How are patients responding to the care I provide? To the care my learners are providing? Are they satisfied? Do they feel well cared for? Am I happy with their care? What can I do to improve?
Patient	Formal	360 Evaluation Patient satisfaction feedback	How are patients viewing the care I provide? The care my learners are providing? How does it compare to others? Is there something I need to do to improve?
Colleagues	Informal	Hallway conversations about patients or learners, referrals and consultations	How does what I do for patient care and/or teaching compare to others? Are there better ways to teach/ manage care?
Learners	Formal	Learner evaluations	What do learners think about my teaching and/or patient care? Are there areas that I can improve or enhance?
Learners	Informal	Conversations, informal feedback, nonverbal communication, nature and number of questions asked by learners	How are learners reacting to my teaching? Does it seem like they are learning? What changes can I make to improve?
Electronic databases	Formal	Patient outcomes, process outcomes (referrals, follow ups, comparison to standards and guidelines)	Are my patients getting the best care I can provide? How do I compare to relevant standards and guidelines? Are learners caring for my patients providing the best care, and what feedback do they need to improve?

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REFLECTING ON WHAT WE LEARNED!

by the OEFD team

During the past year, OEFD members participated in a number of professional development events. The following is a selection of some of the hot topics we learned about.

DON'T LEAVE WITHOUT YOUR MAP: A PRACTICAL WORKSHOP ON CURRICULAR MAPPING FOR FACULTY DEVELOPMENT PROGRAMMING

by Anita Ens

Workshop presented by Paul Hendry, Robert Parson, and Heather Lochnan, University of Ottawa

Curriculum mapping is the process of visually documenting intended learning outcomes of a given educational program considering breadth, depth, and timing of curricular mechanisms used to achieve these outcomes. Depending on the purpose of the exercise, curriculum mapping can trace milestones, stages, or spiral curricular design.

In this workshop, facilitators introduced the topic by presenting their recent experience of mapping. Participants then applied tips from the introduction to a sample curriculum mapping activity, using provided materials and topics. A course grid helped small groups to identify where specific topics were taught as a primary focus, secondary concern, or in tertiary fashion. Group members transferred this information to the larger curriculum map. Large group discussion of the resulting map surfaced questions and ideas that further promoted understanding of the process.

The exercise demonstrated the usefulness of seeing where and when information is taught and then considering how that might inform program quality improvement - especially in curriculum design - and inform accreditation.

INTEGRATING MINDFULNESS INTO MEDICAL EDUCATION: RETHINKING TEACHING AND LEARNING TO SUSTAIN PROFESSIONAL IDENTITY

by Ingrid Toews

Workshop presented by Carol Gonsalves, Millaray Sanchez-Campos, and Heather MacLean, University of Ottawa

The University of Ottawa has an Academy of Mindfulness and Contemplative Studies. The Academy is an interdisciplinary group of faculty and students who collaborate in fostering research, teaching and learning in mindfulness. One of the Academy's initiatives involves training medical students in awareness, curiosity, and compassion. The presenters discussed how mindfulness can minimize the negative impact of stress, cognitive load, and uncertainty on professional identity. Their mindfulness program began as a voluntary initiative. Through strong support from the Deans and other stakeholders the program was made mandatory for medical students in Clerkship. A didactic, narrative, and experiential approach is incorporated within the program.

PROFESSIONAL IDENTITY FORMATION

by Christen Rachul

I had the opportunity to attend several presentations that focused on professional identity formation. The presentations highlighted how personal, educational, and professional experiences contribute to the formation of the professional identities of students, residents, and even new

REFLECTING ON WHAT WE LEARNED!

their assessment program as a study in action and reap the benefits of increased confidence in assessment outcomes.

Recommended Reading

Bloch, R., Norman, G. (2012). Generalizability theory for the perplexed: A practical introduction and guide: AMEE Guide No. 68., *Medical Teacher, 34* (11).960-992.

Shavelson, R., & Webb, N. (1991). *Generalizability Theory: A Primer.* Measurement Methods for the Social Sciences Series. Thousand Oaks, CA: Sage Publication, Inc.

WORKPLACE-BASED ASSESSMENT: AN ESSENTIAL COMPONENT OF COMPETENCY-BASED MEDICAL EDUCATION

by Tanya Walsh

Workshop presented by Shirley Schipper & Shelley Ross, University of Alberta

Competency-based education (CBE) requires us to move beyond just assessing what learners *know* to also assessing what they can *do*. This may be a huge culture shift for some education programs. CBE requires that we move from indirect measurement of knowledge to direct observation of student competencies in the workplace. The task of recording those observations and giving feedback can seem arduous. How many assessments do we need? When will we be certain that the student has reached the 'gold standard'?

Schipper and Ross suggest taking a step back from worrying about 'objective measures' of performance because, in the end, the tool used is less important that the person who completes it. They acknowledge that assessors are fallible. However, it is possible to help assessors become meaningfully idiosyncratic. We can do this by allowing them to *tell us what they see instead* of *us telling them what to see* by giving them overly-complicated forms. In other words, encourage them to complete regular narrative assessments. Why? Because language is more important and more valuable than numbers on a scale.

That said, it would be a good idea to train your assessors to use good language – language that is about the task observed instead of a personal comment about the learner. Comments such as "Resident provided clear and accurate information to patient" are far more useful than "Resident was a pleasure to work with".

Schipper and Ross provided a number of suggestions to increase the quality of the narrative feedback from raters. However, one easy suggestion for assessors was to improve feedback by adding the word 'because' to an observation. Instead of saying "I think you did a great job", say "I think you did a great job because…". Completing that simple phrase greatly increases the quality of feedback without an excessive amount of work.

UPCOMING EDUCATION CONFERENCES AND EVENTS

August 25-27, 2017, International conference on Faculty Development in the Health Professions, Helsinki, Finland, amee.org/conferences/4th-faculty-development-conference

October 19-21, 2017, International Conference on Residency Education. Quebec City, QC. royalcollege.ca/rcsite/events/international-conference-on-residency-education-icre-e

October 25-29, 2017, POD Network Conference, Montreal, PQ, podnetwork.org/event/2017-pod-network-conference/

October 31-November 3, 2017, Educause Annual Conference, Philadelphia, PA, events.educause.edu/annual-conference

professionals as they transition into independent practice. Presentations demonstrated how the curricular initiatives, student supports, and mentorship opportunities can help students and residents navigate their way through new and evolving professional identities.

Of particular note, one of the University of Manitoba's own medical students, Dorothy Yu, presented results from an on-going study focused on predictors of imposter syndrome in medical school. Edvin Schei, a visiting professor at McGill University, presented on a curricular initiative to develop and promote empathy in a Norwegian medical school that requires first year medical students to interview patients to learn about living with serious and chronic diseases from a patient's perspective and to also learn to acknowledge and address their own emotions. Chirag Bhat from Western University discussed the role that a discipline's threshold concepts, or "troublesome" concepts, can play in professional identity formation and working with struggling residents. Brett Schrewe from the University of British Columbia discussed the uncertainties and challenges to professional identity that come when transitioning from residency to independent practice. He advocated for educational content that helps prepare medical students and residents for flexibility and uncertainty when they enter new contexts.

INTRODUCTION TO G-THEORY

by Stephanie Giberson-Kirby

Workshop presented by M. Palacios, E. Oddone Paoluci and A. Kassam, University of Calgary

With the implementation of competency based medical education, assessors are looking for ways to increase the reliability and validity of their training measurement tools. Generalizability theory (G-Theory) is a statistical method that may be used to examine the relative contribution of the primary variable of interest (learner performance), in comparison to other variables in the assessment processes/tools. While Classical Test Theory may be used to estimate one source of error measurement at a time, G-theory generates an estimate of multiple sources of measurement error separately and then includes them in one reliability estimate. Thus, assessment program designers can evaluate how to improve the quality of their measurement procedures.

Systemic factors that affect learner performance, such as rater expertise or severity, time of day, testing environment, and task or item differences can be pulled apart, more clearly revealing learner performance. G-theory can be applied to answer questions such as, How many raters are sufficient to run an OSCE? How many items are needed on a rating scales? How many performance observations are required to reveal learner skills and knowledge?

The facilitators for this workshop provided the theoretical foundation of G-theory, a framework for G-theory study implementation, and shared their study experiences. They emphasized the time-intensive nature of designing the study and the need for appropriate software (e.g. SPSS, G String). They also strongly encouraged educators to view

CELEBRATING EDUCATIONAL RESEARCH

by Christen Rachul

On May 16, 2017, the Office of Educational and Faculty Development held our annual Educational Research Day to celebrate the wide range of research being conducted on health professions education at the University of Manitoba. The afternoon event showcased over twenty projects that focused on teaching and learning in undergraduate, postgraduate, and continuing professional development contexts in medicine, nursing, pharmacy, rehabilitation sciences, and human nutritional sciences.

We kicked off the event at noon with five oral presentations:

Dr. Amanda Condon (coauthors: Durcan A, Morrow A, Whetter I) presented on the development of a longitudinal preclerkship curriculum in Family Medicine that considers social accountability, community awareness and interprofessional collaboration.

Dr. Megan Delisle (coauthors: McCarthy B, Hebbard P, Rivard J, Wirtzfeld D) presented on the development and implementation of a formal mentorship curriculum for general surgery residents.

Dr. Ming-Ka Chan (coauthors: Matlow A, Dath D, Pannor Silver M) presented on the development of an international competency-based resident leadership curriculum.

Dr. Roger Suss (coauthor: Gottschalk T) presented on the development of an evidence-based medicine assignment that helps preclerkship students decode the disciplines and learn threshold concepts.

Dr. Eleanor MacDougall (coauthors: Gripp K, Kojori F, Chan M, Chiu A) presented an integrated approach to teaching and assessing the CanMEDS health advocate and collaborator roles in pediatrics.

The oral presentations were followed by poster presentations from faculty, postdoctoral fellows, and students from across the Rady Faculty of Health Sciences that also offered participants a great opportunity to expand their networks and develop new collaborations.

Educational Research Day concluded with a hands-on workshop on qualitative data analysis. Both new and experienced qualitative researchers had the opportunity to learn about, discuss, and practice techniques for moving from data to theory in this highly interactive workshop.

Thank you to all of the researchers who contributed to this engaging and informative event.

Image from http://www.aera.net/Education-Research

FEATURED COLLEAGUE

HEATHER LONG

INTERVIEWED BY STEVE YURKIW

WHAT IS YOUR ROLE WITH OEFD?

As a Research Associate with the OEFD, I am involved in program evaluation and original research. My tasks cover the continuum of research, beginning with the creation of a research question and data collection instruments, to the collection and analysis of data, and finishing with report writing and dissemination of the results.

WHAT DID YOU DO BEFORE?

Most of my career has been working in the area of clinical research. I have been involved in a number of studies, including research with the former Exercise Physiology Lab at the Children's Hospital, two projects involving the needs of breast cancer patients, and the utilization of breast health services in Manitoba. I was also involved in a clinical drug trial involving traumatic brain injury, and research exploring treatments for aneurisms, and the impact of gamma knife treatment in brain ailments. Most recently, I was involved in a multi-disciplinary study investigating patient safety within day hospital discharge procedures. I'm grateful to have worked with and learned from so many highly esteemed people along the way!

WHAT IS ONE ENJOYALBLE ASPECT OF YOUR JOB?

From a small child, I have always been rather inquisitive. If you were to ask my friends and family, they would say that I just ask too many questions. Now I get paid to ask questions and hopefully find the answers. A perfect fit!

Working in research means that continuous learning is the norm. With my job in OEFD, as each research study begins, there are always new programs, curriculums, learning frameworks, and teaching strategies that I learn more about. Constant learning is what keeps any job interesting.

WHAT IS YOUR FAVORITE NON WORK-RELATED ACTIVITY?

Soccer! Whether it be outdoor, indoor, women's, co-ed, I've played on more soccer teams than I would like to share and to an age I would be wise to keep to myself. I consider myself to be like an old dog, one that needs to chase a ball to break into a run.

Seriously though, as my education is in Kinesiology and Exercise Sciences, I have an appreciation for the importance of keeping active. I manage to build exercise into my daily routine. Even if it is something as simple as a noontime walk or doing my errands on foot, I make an effort to hit the pavement every day. Like it or not, my crusade to remain physically active extends to my encouraging my family and friends as well.

WHAT BRINGS YOU JOY?

I set aside one evening each week to volunteer at the Winnipeg Humane Society (WHS). It never ceases to amaze me how something as simple as cat cuddling can be so fulfilling. Sadly, many animals left behind at shelters are frightened and can display varying levels of aggression. In spending some quiet time one-on-one with these animals, I can play a small role in helping rehabilitate them. It brings me tremendous joy when this aggression is slowly replaced with trust, and these animals are successfully adopted into a forever home. And I am proud to say I have adopted two 'fur kids' of my own from the WHS. I simply cannot imagine a life without pets or pet hair. I'd encourage anyone with a passion for animals to volunteer at an animal shelter. It is so immensely rewarding!

LAUNCH OF COMPETENCY BY DESIGN

On July 1st, 2017, two of the Max Rady College of Medicine's postgraduate medical residency programs will be transforming to a competency-based education model. Competency based education is an outcome based model of education, organized around a framework of competencies. Competency by Design (CBD) is the Royal College of Physicians and Surgeons' approach to competency based education. Four important concepts are highlighted in the CBD model: Entrustable professional activities (EPAs), milestones, competence continuum, and competence.

In CBD, outcomes are defined as a key task of the discipline and are referred to as **EPAs.** To be deemed competent in an EPA, a learner must be able to perform the task without direct supervision in a given health care context. A second important component of CBD is the concept of milestones. **Milestones** are the expected ability of a health care professional at a stage of expertise (Royal College of Physicians and Surgeons of Canada, 2016). Milestones allow for the developmental nature of EPAs and guide curriculum development.

The **competence continuum** reflects the developmental nature of competency. In CBD, the continuum has four stages: transition to discipline, foundations of discipline, core of discipline, and transition to practice (see Figure 1). A learner moves through phases based on achievement of EPAs and milestones.

Important to this model is the concept of competence. In CBD, **competence** is defined as "the array of abilities across multiple domains or aspects of physician performance. Competence is both conditional on, and constrained by, each physician's practice contexts, is dynamic and continually changes over time" (Royal College of Physicians and Surgeons of Canada, 2016, p. 2).

On July 1, 2017, the otolaryngology—head and neck surgery and anesthesiology residency programs will be pioneers offering the new CBD model. Over the past year, they have worked with colleagues across Canada to define milestones and EPAs and to redevelop their training programs to align with the new competence continuum. Locally, programs have been redeveloping their program in response to the new training requirements. Next year it is expected that another ten programs will move to the CBD

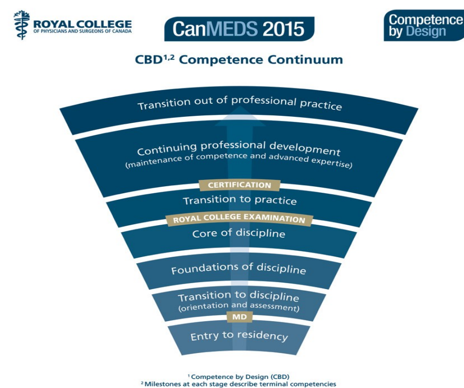

Figure 1. Phases of training

model, with all residency programs expected to move to the CBD model over the next five years. It is going to be a busy time in the Max Rady College of Medicine.

Royal College of Physicians and Surgeons of Canada. (2016). canmeds.royalcollege.ca

FACULTY DEVELOPMENT PLANNING

At this time of the year, we begin our planning process for next year's faculty development workshops. If you have ideas or thoughts about what you would like to see, please let us know at OEFD@umanitoba.ca.

Thank you to everyone who participated in our 2016-2017 faculty development workshops and seminars. We delivered over 60 faculty development workshops in the 2016-2017 academic year to over 500 participants! Although most of our sessions were delivered face-to-face, we also expanded into offering webinars, and are currently developing two online courses: one to prepare faculty to teach online and a second on course development. Watch this space in the fall for highlights of our fall faculty development plan.

We would also like to extend a big thank you to those who provided feedback after our workshops or completed our faculty development needs assessment survey. Your ongoing input into our programs helps make them a success!

ISSUE EDITOR Joanne Hamilton | CONTENT Joanne Hamilton, Anita Ens, Ingrid Toews, Christen Rachul, Stephanie Giberson-Kirby, Tanya Walsh, Steve Yurkiw | PROOFREADING Karen DePape

OFFICE OF EDUCATIONAL & FACULTY DEVELOPMENT
Rady Faculty of Health Sciences, University of Manitoba
S204 Medical Services Building, 750 Bannatyne Avenue
Winnipeg, MB | R3E 0W2
Phone: 204-272-3102 | Fax: 204-272-3169

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