

## Seminar: Innovative Clinical Reasoning in an Evidence Based World



### DR ANGELA BENFIELD

We are excited to have Dr Angela Benfield at the school for one week in January.

**Seminar title: Innovative Clinical Reasoning in an Evidence Based World**

**To be held at Otago Polytechnic.**

**No charge to attend**

An introduction to Angela:

Angela lives in Wisconsin USA. She is an enthusiastic, bubbly person who loves to talk about occupational therapy and how to raise the standards of our profession. Angela completed her PhD in 2015. The topic was “Developing a measure of evidence-informed professional reasoning”. This is a quantitative approach to evidence based practice. She has run several workshops at occupational therapy conferences on this topic eg. The Canadian Occupational Therapy Association National Conference and the AOTA National Conference. She has been collaborating with the Otago Polytechnic study that aims to identify key markers of EBP and to integrate this into the curriculum.

Her visit is a wonderful opportunity to get engaged in discussions about how we identify and promote the outcomes of our practice. She is passionate about this! It’s great to see younger members of our profession developing new ideas and challenging us to find ways to make our mark in practice.

You are welcome to attend any of these forums. Please note that while the topic might sound ‘academic’ Angela has a very engaging style and some wonderful insights into how we determine the outcomes in our practice (and how we teach students to be critical thinkers). Please do register for these events so we have an idea of numbers. **There is no cost!** Please contact Linda Robertson if you have any queries & if you plan to attend. [Linda.robertson@op.ac.nz](mailto:Linda.robertson@op.ac.nz)

Date	Activity
Mon 28 <sup>th</sup> Jan	What’s new in clinical reasoning? [2 PhD students]. 3-5pm: G106
Tues 29 <sup>th</sup> Jan	Modern test design: 9-11am. G106 Workshop: Causal models and cognitive maps: 1-5pm pm.
Wed 30 <sup>th</sup> Jan	Workshop: Working out our outcomes: 10 - 12 pm.
Thurs Jan 31 <sup>st</sup>	xxx
Friday 1 <sup>st</sup> Feb	Workshop: Follow up to information on causal models with OT school: 9-12am.

### Programme information:

**What’s new in clinical reasoning:** An overview of current research as explained by PhD students. Their rationale for doing the study and what excites them about the findings.

- Angela Benfield (Occ Therapy): “Developing a measure of evidence informed professional thinking”.
- Sian Griffiths (Occ Therapy): “A situated approach to clinical reasoning”

**Modern test design:** Most of the measures used by therapists currently were developed using classical test theory which requires the reliability and validity to be established with each population, and the tool is population sample dependent. Further, many tests use Likert scoring which is not interval data - limiting the ability to use these tools as outcome measures without extensive information on standard error of measure, minimal detectable difference, and minimal clinically significant change. Modern test theory or item response theory selects items by identifying unidimensional items and placing them into a probabilistic Guttman scale, converting ordinal data to ratio level data. This allows the tools to become population free, which is critical when working with disparate populations.

**Working out our outcomes/causal models:** For many of our clients, their clinical problems are "messy"- not clearly and absolutely caused by one specific factor, like lack of insulin production in diabetes. Further, many clients will work with an interprofessional team to solve their problem, each of whom may define it and their causes in different ways. In order to assess our outcomes, we need to elucidate our causal model - or the theorized factors that the intervention is changing, and select outcomes that measure the specific construct.

**Cognitive Mapping:** Historically, we have used frames of reference and theories as the reference point to interpret, link and recall information. Research has found that we use cognitive maps (mental models) when acquiring, coding, storing, recalling, and integrating information, however, we frequently do not elucidate the factors, especially with complex knowledge which is drawn from multiple sources. Cognitive mapping has been used in education to support the learner in identifying what they know, how things may be linked, and to solve problems in ill-structured domains. Cognitive mapping has been demonstrated to help novice learners organize their thinking to improve understanding, more efficient retrieval, and application of knowledge to solve problems.

Interestingly, research has shown that having psychologists map a clinical problem, one can identify what actions they will take with the client. Further, the actions (interventions) are not driven by evidence nor profession but by the specific causal model that the therapist has developed integrating his/her experience, beliefs, and knowledge. Therefore, helping students and clinicians develop their causal model (cognitive map of a specific clinical problem) can increase their ability to validate the model, identify if cognitive biases are influencing their thinking, and increase their ability to measure the construct that their behaviours is *really* changing.

---