

Developing a research disposition

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Developing research literacy

- Competency in research skills is a core component of osteopathic curricula
- Research literacy:
 - Focus on evidence-based medicine
 - Ability to critically appraise literature

Developing research literacy

Allied health and CAM courses in Australia:

- Undergraduate units on research methods
- Focus on evidence-based medicine
- Post-graduate research projects

Research as a pedagogical tool



- Research units in undergraduate program
- Research project in the Masters program

A pedagogical tool:

- Develop teamwork
- Develop ethical practice capabilities
- Investigate an area of clinical relevance

Researching practice

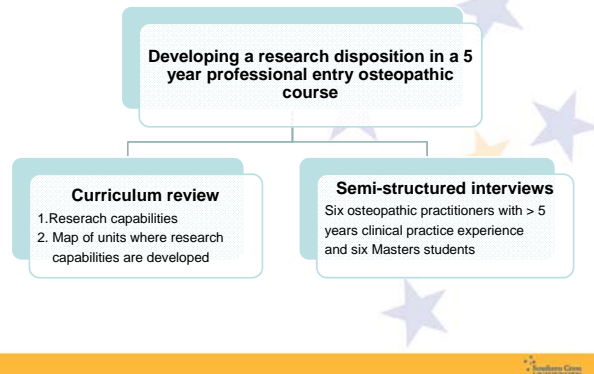
- Practice knowledge: observed and learned from practice (e.g. pattern recognition, new applications of techniques, new patient responses, preventive medicine strategies, collaborative practice learning)
- Research can turn practice knowledge into theory
‘... created to explain, explore and extend practice’
(Higgs, 2010, p. 5)

Developing research literacy

Research training needs to develop graduates who

- enter practice with an inquiring attitude
- can identify research questions that derive from clinical practice.

Pilot study



Findings: Curriculum review

Research capabilities

- Focus on evidence-based medicine and evidence-informed practice
- Focus on critical appraisal skills

Graduate capability 3.8.1 Critically evaluate evidence by applying a knowledge of research methodologies and statistical analysis

Findings: Curriculum review

Research capabilities

- No reference to developing an inquiring attitude
- No reference to practice as a research space

Findings: Practitioner interviews

• From their professional entry education:

awareness of literature, poor critical appraisal skills, keen focus on clinical practice but not on the learning or research environment they were entering

• From their clinical experience:

limitations of research evidence, rich learning from clinical practice, a keen interest in research on clinical practice

Findings: Student interviews

• Relationship between research and clinical practice

The research project highlighted the challenges involved with integrating research evidence into clinical practice, particularly related to the lack of evidence or inconclusive or contradictory nature of much of the research related to manual therapies.

(Student 1)

Findings: Student interviews

From considering ethical implications of my research I can see the potential for harm in almost every clinical situation that I face. However, I feel that many of the potential scenarios are highly unlikely to eventuate and so the considerations that I had to make for my research project do not enter my mind when I'm in clinical practice.

(Student 2)

Findings: Student interviews

- **The research experience:**
 - research projects perceived as unrelated to theoretical education and clinical practice
 - time-consuming and stressful
 - became a more positive experience over time

Pedagogical implications

Need to prepare students for

- Practice as a collaborative space
- Practice as a learning space
- Practice as a research space

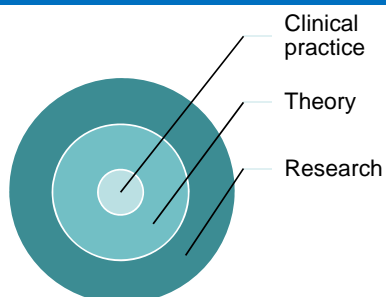
Pedagogical implications

- Need to cultivate a research disposition – the ‘inquiring self’
 - Being a practitioner is being a researcher – always adapting, trialling, testing and retesting for best patient outcomes

Pedagogical implications



Pedagogical implications



Pedagogical implications

Curricular approaches

- Embed research in all aspects of the curriculum, not just in dedicated units and projects
- The teaching/learning/research nexus
 - research informed teaching
 - research active staff
 - problem-based learning

Pedagogical implications

Research community

- Welcome students into the research community and culture of the school
 - Early and consistent exposure to school and university wide research activities (seminars, 3 minute thesis competition, lectures by visiting researchers, PhD students)
 - Adequate resources for students' research projects

Pedagogical implications

Clinically relevant research

- Cultivate collaborations between university researchers and practising osteopaths
- Establish pathways for practitioner researchers
 - PhD scholarships/internships
 - Collaborations with researchers in the school
 - Continuing professional development opportunities