POSITIONING MEDICAL STUDENTS’ INFORMATION FLUENCY THROUGH THE CURRICULUM AND BEYOND

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Overview

• Deakin University School of Medicine began teaching Feb 2007
• The BMBS medical program at Deakin University
• The development of an embedded information fluency strategy
• Ongoing development of partnerships and collaborations to support a dispersed program and student population
Establishment of the Deakin University School of Medicine

- Demand for Doctors in rural practice
- Government awarded program to Deakin
- Library responses to new program
  - Space,
  - Collection,
  - Staffing,
  - Services.
Create your own space

Deakin University Library
• Diverse study and research environments
• Flexible learning
• Online resources and services
• Choice for students….

Bachelor of Medicine / Bachelor of Surgery

- Graduate entry, 4 year program
- 120 students pa, increasing to 180 by year 4
- Years 1 and 2 campus-based
- Years 3 and 4 – continuous placement in geographically distributed off-campus clinical schools
School of Medicine curriculum

Themes in the Deakin Curriculum

- Knowledge of Health and Illness
- Doctor and Patient
- Doctors, Peoples, Cultures and Institutions
- Ethics, Law and Professional Development

Year 1
Year 2
Year 3
Year 4
Student characteristics

- Graduate entry course
- First degree not necessarily in biological sciences
- Many with prior experience in health care
- All students provide their own networked laptop computer
- Varying familiarity with medical resources and online resources
Geographic distribution
17 sites, about 70,000 sq km and growing
Questions about using library resources

Your questions (click to collapse)

Your questions will be answered by the Medical Librarian Jan Weaver

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<th>Date</th>
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Mark as Read | Mark as Unread | Create Printable View

View Drafts
Embedding information fluency: the first two years

What happened during the first two years, when study is undertaken on campus

First year of operation (2008)
• Orientation; EBM; professionalism (ethics debates)
• Spread through semesters 1 and 2

Second year of operation (2009)
• Information fluency concentrated early in first semester of year 1
• No focus on information fluency during year 2
Mapping information fluency across the curriculum

A map based on accepted standards was drawn and presented to the School of Medicine Curriculum Committee, thence to the Teaching and Learning Committee.

Capabilities progressively developed during a course

- Recognises the need for information (know)
- Finds information effectively and efficiently (access)
- Critically evaluates information (evaluate)
- Manages and applies information (use)
- Uses information with understanding (ethical/legal)

Modified to the four year BMBS course
<table>
<thead>
<tr>
<th><strong>Recognises the need for information</strong> (know)</th>
<th><strong>Beginning (year 1)</strong></th>
<th><strong>Consolidating (year 2)</strong></th>
<th><strong>Lifelong learning (year 3/4)</strong></th>
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<tr>
<td></td>
<td>Understands the need to gather information to solve a problem, engage in a debate or present information to peers</td>
<td>Understands that information is presented differently according to different study designs and purposes e.g. clinical trials, case studies, clinical guidelines, systematic reviews, long term cohort studies etc</td>
<td>Understands how information is organised in a clinical setting and within the context of evidence based medicine</td>
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<td>Understands the difference between background and foreground knowledge in clinical problem solving</td>
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<td>Maintains awareness of new information resources in a clinical setting</td>
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<td><strong>Finds information effectively and efficiently</strong> (access)</td>
<td>Understands the exponential growth of information, and that it comes in a variety of formats, and from different sources</td>
<td>Selects and accesses appropriate methods or tools for finding information</td>
<td>Consistently chooses the right sources, selecting the most appropriate methods or tools for finding information</td>
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<td>Recognises and can distinguish between citations for different types of resources</td>
<td>Demonstrates the ability to retrieve, evaluate, manage and utilise information for problem solving and making decisions that are related to the care of individuals and populations</td>
<td>Knows methods for keeping up-to-date in research areas e.g. can set up a database alert service, RSS feed etc.</td>
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<td>Explores and accesses library information sources, e-readings, unit reading lists and course materials to develop familiarity with topic</td>
<td>Can develop, execute and revise an evidence-based information search plan</td>
<td>Summarises the main ideas extracted from the information gathered</td>
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<td>Can develop an evidence-based information search plan and identify topic key concepts and terms in order to seek information</td>
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## Competency mapping

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<th>Critically evaluates information</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3 and 4</th>
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<td>• Understands factors that influence the validity of information</td>
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<td>• Distinguishes between clinically oriented and patient-oriented information and resources</td>
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<td>• Able to evaluate conflicting information from a range of sources to obtain varying perspectives and to understand issues</td>
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<td>• Understands how to apply clinical evidence in context</td>
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<td>• Ability to appraise the validity of individual clinical studies</td>
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<td>• Defines and applies criteria to examine and compare information from various sources to evaluate reliability, accuracy and authority</td>
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<td>• Ability to quantify and communicate the degree of uncertainty associated with specific items of clinical information, eg. number needed to treat</td>
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<td>• Understands uncertainty in medical information and clinical decision making, and is able to communicate this in an appropriate manner</td>
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<td>• Recognises and can communicate relative risks and benefit of outcomes and treatment options in relation to clinical evidence</td>
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“Collaboration; The art of thinking independently together” Malcolm S. Forbes

- Clinical school sites: rural hospitals; rural practices
  - Hospital libraries
  - Equity of access to resources for students
- Learning and teaching with other academic institutions
  - Learning management systems
  - Academic libraries
- Research centres
  - Student and staff involvement
  - collaboration
Collaborative environments: the challenges