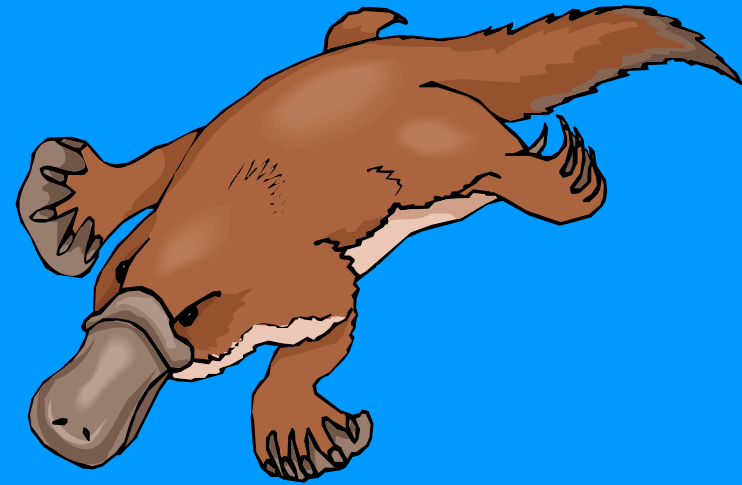# New Breed Or Different Species: Is The 21st Century Health Information Professional Generic Or Specific?

Andrew Booth, Reader in Evidence Based Information Practice, University of Sheffield

"May you live in interesting times"

- **The so-called "Chinese curse"**
- According to Wikipedia, it is not a Chinese curse at all!
- **May be related to the Chinese Proverb:**
- *It's better to be a dog in a peaceful time than be a man in a chaotic period.*
- In Cape Town, South Africa, on June 7, 1966, Robert F. Kennedy said, "There is a Chinese curse which says, "May he live in interesting times." Like it or not, we live in interesting times..."
- **Does the WikiAmazoogle Generation need the 21st Century Health Information Professional at all?**

But we **do** live in interesting times….

- Clinical Librarian
- Primary Care Information Outreach
- Systematic Review Information Specialist

- Information Specialist In Context
- Informationist
- Intranet Manager, Consumer Health Adviser, Specialist Trainer etc, etc

Not forgetting the "health librarian"

- Health information equivalent of primary care physician (GP)

- May encounter hundredth presentation of frequently encountered complaint or unique requirement of very specialist problem.

Future Proofing the Profession (2004)

- CILIP Health Executive Advisory Group report argued developments within healthcare library and information services are relevant to the profession more generally.

- Certainly true within CPD as health sector 'has supported work-based learning as one of several ways to improve skills and provide opportunities for lifelong-learning for its workforce'[i].
[i] Chartered Institute of Library and Information Professionals. *Future Proofing the Profession: the report of the Health Executive Advisory Group.* CILIP, 2004.

Health leadership role clearly seen in:

- Evidence Based Practice &

- Knowledge Management
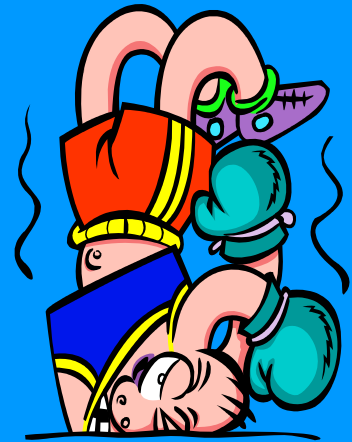
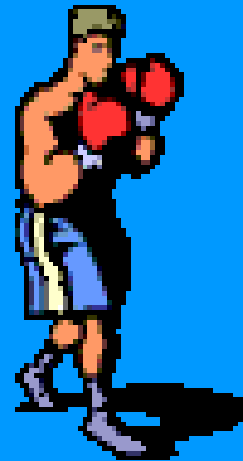# Generic versus Specialist

- Contextual knowledge [Specialist]
- Managerial skills   [Generic]
- Professional skills   [Generic]
- Learning and teaching [Generic]
- Interpersonal   [Generic]
- & NHS Context   [Specialist]
- Technical   [Generic]

  = COMPLIANT (Lacey & Booth, 2003)

In the red corner…….
…………………blue corner

- ### The Case for Specialist Skills

- ### The Case for Generic Skills

The Case for Specialist Training

Based on the Spectral Project

Specialist (SPECTRAL)

Aim: To develop detailed proposals for specialist training in clinical question answering for informaticists / librarians

Commissioned by: National Knowledge Service as one of series of projects on clinical question answering services (CQAS)

Carried out by: ScHARR, University of Sheffield (January-March 2006)

(Booth, Beecroft & Lynch, 2006)

Essential? Desirable? Not required?

Understanding clinical questions	93%	7%	0%
Conducting reference interview	64%	36%	0%
Focusing question	79%	21%	0%
Mapping question to research design	43%	36%	21%
Referral to specialist sources	79%	21%	0%
Using methodological filters	50%	50%	0%

Essential? Desirable? Not required?

Literature searching	100%	0%	0%
Bibliographic databases	93%	7%	0%
Boolean logic	86%	14%	0%
Evidence Based Sources	93%	0%	7%
The Internet	93%	0%	7%
Using methodological filters	**50%**	**50%**	**0%**

Essential? Desirable? Not required?

Identifying for relevance	79%	21%	0%
Critical appraisal	79%	21%	0%
Ranking items for validity	50%	43%	7%
Summarising evidence	57%	36%	7%
Producing CATS/Digests	43%	50%	7%
Statistical measures	57%	36%	7%

Essential? Desirable? Not required?

	Essential	Desirable	Not required
Synthesising the evidence	64%	36%	7%
Identifying implications	36%	50%	14%
Presenting methods/results/ identifying limitations	36%	50%	14%
Communicating answers	79%	14%	7%
Assuring quality of CQAS	86%	7%	7%
Auditing/Evaluating CQAS	57%	43%	0%

Evolution of roles

Where they want to be
1. Asking
2. Finding
3. Appraising
4. Acting
5. Evaluating

Where they are now
1. Asking
2. Finding
3. Appraising
4. Acting
5. Evaluating

CQAS

1. Asking
2. Finding
3. Appraising
4. Acting
5. Evaluating

1. Asking
2. Finding
3. Appraising
4. Acting
5. Evaluating

General

A recent perspective (Petrinic & Urquhart (2007)

Health Librarian roles

- Literature searching (reference work)
- Outreach work
- Teaching and training
- Numeracy-related skills,
- Influencing and persuading skills to work across organizational and departmental boundaries
- Experience of financial management

Clinical Librarian roles

- Knowledge of anatomy and physiology,
- Origin and meanings of medical terms,
- Project management
- Literature searching
- Knowledge of evidence-based practice,
- Research methods (quantitative and qualitative) and epidemiology.

Extract from Review of Current Training Provision

Using methodological filters

- Finding the Evidence [BMA]
- Online searching course (advanced) [BMA]
- ADEPT/PrECEPT Programme [ScHARR]

Identifying articles for relevance

- PrECEPT Programme [ScHARR]
- Pragmatic searches to address clinical questions [Clinical Evidence]

Critical appraisal

- Critical Appraisal Workshops – Basic and Advanced [BMA/ScHARR]
- CASP Appraising Workshop
- CASPUK Week

Case Study – ADEPT/ PrECEPT Programme

- Commissioned on regional basis

- Inspired by Ann McKibbon's "Panning for Gold"

- Run since 1998 (ADEPT by elearning/ PreCEPT by monthly face to face)

- Focuses on methodological filters (Applying Diagnosis Etiology Prognosis & Therapy filters – now also includes Secondary Sources & Qualitative)

- PrECEPT includes "Introduction to clinical effectiveness" (Part One) and Getting the Most out of MEDLINE (Part Two)

- Problem based using scenarios and feedback

The Case for Generalist Training

Based on the FOLIO Programme

FOLIO Programme

- Two year series of 12 courses; One year extension of 6 courses

- 6-8 weeks delivered by email and basic Web technologies

- 2-3 hours per week

- Submission of Portfolio – Distinction, Honours, Standard, Fail

- Has spawned FOLIOZ and Precept-Lite

FOLIO Courses to date

1. Information for Social Care
2. Managing Change
3. Maximising impact of your service
4. E-learning
5. Information Needs Analysis
6. Designing/Delivering Information Skills Training
7. Making your case successfully
8. Customer Care
9. Knowledge Management

10. Understanding Clinical Care
11. Evaluating Information Skills Training
12. Managing for Service Quality
13. Surveys & Questionnaires
14. Promoting and Marketing LIS
15. Supervisory skills
16. Extending LIS professional role
17. Management Skills
18. Evidence Based Library and Information Practice

Green = Generic; Yellow = Context-Specific; Red = Specialist

FOLIO Breakout Course

Outline of Breakout course	
Week	**Theme**
1	Introduction: Personal qualities
2	Pursuing self-efficacy
3	Developing an extended librarian role
4	Developing a wider organisational role
5	Testing the water
6	Development and training
7	Portfolio preparation
8	Portfolio submission

'Breaking out of the Box: Extending the health LIS professional role – skills and strategies"

What might Training Programme look like? - 1

Module Zero [Local] - Understanding the Health Service

Module One [Core] - Understanding context of clinical questions

Module Two [Core] - Formulating the question

Module Three [Core] - Finding Evidence – Bibliographic Databases

Module Four [Core] - Finding Evidence – Specialist Sources

Module Five [Core] - Filtering the Evidence

Module Six [Core] - Critical Appraisal

What might a Training Programme look like? - 2

Module Seven (Pt 1) [Core]
  Synthesising/ Reconciling Messages

Module Seven (Pt 2) [Optional]
  Interpreting/Explaining Numerical Results

Module Eight [Core]
  Presenting/Communicating Results

Module Nine [Optional]
  Organising/Delivering a CQAS

Module Ten [Optional]
  Evaluating Your Service

Revisiting COMPLIANT

- Do **T**echnical skills receive unmerited emphasis?

- Very volatile training half-life/ time-limited

- User can construct, via Google, site-specific search engines (swikis), personalised search page, gadgets e.g. To do list, text translator, person-specific RSS news feeds.

- Very few technical skills remain exclusive domain of health librarian.

- Alternative to **T**echnical?

- Knowledge of social networking tools e.g. blogs, wikis and podcasts would be useful.

- Little technical knowledge required - comprehensive knowledge of possible uses.

- Health librarian probably inhabit Facebook community, use Citeulike to share references and occasionally visit YouTube and MySpace.

But what will be <u>next</u> Facebook/YouTube? **COMPLIAN**T should read **COMPLIAN**CE (T for Technical replaced with CE of Continuing Education!)
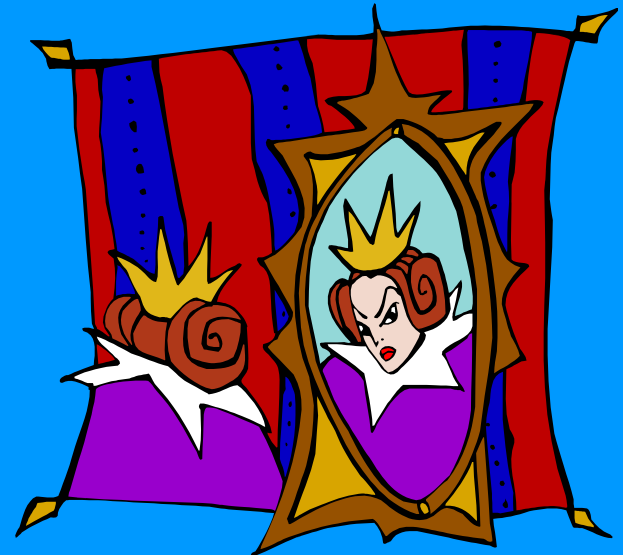
Otherwise danger we will settle for alternative - COMPLACENCE!

The Wider Picture?

- **Declarative (What to do)**

- **Procedural (How to do it)**

- **Contextual (What the context requires)**

- Each requires different training formats/techniques (e.g. contextual – mentoring/shadowing/secondment)

- **Focused (Specialist)**

- **Polished (Professional)**

- **Reflective (Lifelong learning)**

Reflective Practice

- "Evidence based practice is about best practice and reflective practice, where the process of planning, action, feedback and reflection contributes to the cyclic process of purposeful decision making and action, and renewal and development".

(Todd, 2003)

The future of EBLIP

- "the long-term future of evidence based [library and] information practice probably lies…in a more encompassing approach that embodies reflective practice…..the ability to critically analyse, make informed judgements and direct actions can be triggered by any number of catalysts, of which research evidence may be just one…."

Booth (2003).

Barber versus Surgeon?

- Barber's art dates to the Bronze Age.
- Profession of surgery comparatively recent origin.
- Art of barber unchanged over many millennia
- Profession of surgeon continues to evolve, stimulated by technical improvements/technological innovation.

Difference?

- Building up/transmission of an evolving body of knowledge? Developed through reflective practice!
- Professional surgeon reflects on how procedure might be enhanced and improved.
- Perhaps rewarded by having new version of procedure attributed with his/her name!

Name one famous barber!

We exclude Sweeney Todd…

Who is hardly a role model!

To survive as a species…

- Not simply *adapting* to ever changing environment, "shifting information landscape".

- Not even sufficient to "*mutate*" - such changes do not equip us beyond particular set of circumstances in which we currently find ourselves.

- Need to continually *recreate* our roles so we can develop and thrive in even most hostile of environments.

Booth, A. (2003) Where systems meet services: towards evidence-based information practice. *Vine* 33 (2): 65-71

Booth A, Beecroft C & Lynch C. (2006) **SPEC**ialist **TR**aining in clinical question Answering for informaticists/**L**ibrarians (SPECTRAL). Sheffield: School of Health and Related Research (ScHARR), University of Sheffield.

Lacey, T., & Booth, A. (2003). **Education, training and development for NHS librarians: supporting e-learning. A review commissioned by the National electronic Library for Health Librarian Development Programme**. Sheffield: University of Sheffield, ScHARR (School of Health and Related Research

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