



Commentary

The Unteachable in Pursuit of the Unreadable?

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Introduction

Advocates of evidence based library and information practice (EBLIP) are typically enthusiastic of temperament and beguiling in argument. It is all too rare to encounter either outright criticism of, or even measured caution towards, the paradigm. Reasons for this are clear; EBLIP appeals to the scientific rationality that underpins much of our day-to-day work. It imposes a semblance of order on what is otherwise chaotic, and is exemplified when we (only half-jokingly) say, "Of course it would all work perfectly, if it weren't for our users." However, the real world is messy and uncertain, and problems proliferate.

For some professions, medicine being the foremost example (Hayward), uncertainty is a natural state of affairs. "Is this drug, which has been shown to benefit patients on average, likely to be beneficial in my patient who is older, has a more advanced stage of disease, and has an additional co-existing condition?" Library and information practice is not so comfortable with uncertainty. As a profession we tend to be optimistic, clinging to a linear and

mechanical model of information transfer between research and practice, by which knowledge is simply moved from one place to another. Our underlying assumption is that if an idea is good enough, it will be used (Nutley, Walter, Davies). A corollary to this is that when we ourselves face a knowledge gap, we believe we can address this simply by acquiring more information – the so-called information deficit model (Marteau, Sowden, Armstrong).

The Unteachable

This editorial deliberately evokes Oscar Wilde's description of fox-hunting, what he terms "the unspeakable in full pursuit of the uneatable" (Wilde). It highlights two overwhelming barriers to EBLIP - one at the consumption end and the other at the production end of the evidence chain; namely that librarians are 'unteachable', and systematic reviews are 'unreadable'. Whether EBLIP proves as futile a pursuit as fox-hunting depends on whether these barriers can be overcome.

Of course there is an element of licence to both appellations. Librarians are not

inherently 'unteachable'; as a profession we show ourselves ever ready to adapt and to respond to new organisational imperatives. However, as hinted above, we do this by addressing an information deficit, by absorbing new data like a sponge.

Critical appraisal, "the process of assessing and interpreting evidence by systematically considering its validity, results, and relevance to an individual's work" (Last), is a building block of evidence based practice. Frequently, when taught such skills for the first time, healthcare or information practitioners expect to arrive at some authoritative answer – life, the universe, and everything equals 42 (Adams). When, in contrast, the session concludes with limited certainty – with, perhaps, more questions than answers – most healthcare professionals can handle this. This is where 'unteachable' comes into the picture. Library and information practitioners respond to the challenge of critical appraisal in their time-honoured fashion – by seeking to learn more about research design, by becoming more familiar with statistics, and by attempting to learn the terminology and concepts associated with the specific context in which the research has been conducted. This quest, this appetite for knowledge, is potentially insatiable. As a consequence, most library and information professionals never feel fully equipped to meet the technical challenges of evidence based practice. In fact the more they learn, the more they recognise that there is much more yet to learn.

Acquiring Self-Efficacy

So what is the solution? Certainly the answer is not to equip librarians with all they need to know. If we add formal training in research design and statistics, and possibly sector-specific terminology, to the array of professional skills we already require, we will produce a

profession that enjoys only a handful of years of competence immediately prior to retirement! Instead, librarians need to acquire self-efficacy, defined as "the belief that one can perform successfully the behaviour required to produce designated types of performance" (Sadri and Robertson 139). The emphasis is therefore not on *what we know*, but on equipping ourselves with as many strategies as possible to handle *not knowing*. Such strategies may indeed include different ways of research and discovery. However, they will also comprise different ways of acknowledging our ignorance and techniques for making decisions when faced with limited information. These might include tools for formal decision-making and informal sharing of 'rules of thumb', grounded in a practical working knowledge of the quality and quantity of our knowledge base.

Thus, library and information practitioners are 'unteachable' to the degree that they rely too much on a single strategy for addressing an 'information deficit'. Only by acquiring strategies for handling uncertainty - an uncertainty endemic to a field where the evidence base is of poor quality, where researchers do not answer the questions that practitioners ask, and where insights are scattered across the literature of numerous disciplines – will they be able to fully engage with evidence based library and information practice.

The Unreadable?

While the accusation that library and information practitioners are 'unteachable' requires brief justification, describing systematic reviews as 'unreadable' may appear downright perverse. After all, are not most systematic reviews structured documents with clear statements of implications for research and practice? Furthermore, as an erstwhile champion of systematic reviews in general, and specifically within library and information

practice, I represent an unexpected source of criticism. The systematic review model does have limitations – a refreshing aspect of the systematic review community is its facility for self-scrutiny – but it is fundamentally sound. However, systematic reviews expend extensive resources and should be pursued only if there is a reasonable expectation of furnishing some ‘answer’ and hence of achieving ‘closure’.

Several factors reduce the likelihood of a useable answer in the field of library and information practice when compared with other disciplines. As previously remarked, our evidence base is poor with comparatively few experimental studies. As a consequence, systematic reviews steer between a Scylla of very precise reviews addressing tightly focused questions (by which we learn more and more about less and less, until we know everything about nothing!) and a Charybdis of broad overviews containing studies which are so dissimilar as to make comparison and synthesis almost impracticable. Similarly, the diffusion of our potential evidence base across many disciplines tends towards fragmentation, rather than consolidation.

The real drawback of systematic reviews, paradoxically the source of their methodological strength, is the quality assurance offered by the review process, regardless of outcome. Imagine having the same quality assurance mechanisms in place for automobile manufacture regardless of whether the resultant car will participate in the Paris-Dakar rally or never leave the showroom. Reviewers are required to follow the same phases of the review process whether they retrieve and synthesise numerous high quality primary research studies, whether they identify only poor quality research, or whether they find no eligible studies whatsoever! Herein lies a paradox; we need a fairly good idea about whether a review topic is viable and cost-effective before we

undertake our review. At the same time we must not have any *a priori* suspicion of what the findings will be, otherwise we are likely to introduce bias.

As a consequence, there is a very strong likelihood that we will continue to witness the production of well-conducted, well-written systematic reviews where the bottom line is that there is *no* bottom line. Such systematic reviews are readable in the technical sense but are ‘unreadable’ to the extent that they offer little or no pragmatic guidance for library and information practice. Practitioners will feel correspondingly little allegiance to an otherwise high-quality ‘academic’ product and will likely concentrate their precious professional reading time on material that is more immediately rewarding.

Diorama, not Microscope?

What, then, is the alternative? As a fundamentally pragmatic profession we continually seek answers to practical questions to benefit our users. We require breadth of vision (a holistic view that embraces multiple perspectives), rather than depth (as offered by systematic reviews). We need a diorama,* not a microscope!

How might this work? The library and information practitioner works with stakeholders to identify a fully-rounded view of a real-life problem. This might involve a genuinely consultative process such as a focus group or group interview. Alternatively the practitioner may piece together a series of individual two-dimensional viewpoints (e.g., the reader and the professional, or the manager and the funder) to create a semblance of the entire problem. The aim is to identify issues, potential causes, interrelationships, and solutions to model – perhaps using such techniques as concept mapping or mind mapping (Ferrario). They then explore the literature to populate their basic models with evidence from research

and other sources such as good practice, surveys, and service evaluations. They employ a best available evidence approach (Eldredge). Lower quality evidence is continually overwritten by higher quality evidence when it is identified, or when new evidence appears. They do not employ a comprehensive and ultimately fruitless attempt to gather high-quality evidence on a single topic. Instead, they try to gain as many insights as are feasible for the entire problem. Beginning with a series of rapid searches around possible causes, there follows a series of searches around likely interventions and alternatives, perhaps culminating in brief searches on how impact has been evaluated. In short, they pursue related approaches variously anchored in the population, interventions/comparisons, or outcomes separately, instead of seeking some 'holy grail' document that contains exactly what they want. Boosted by this multiple array of relevant evidence, the practitioner gains a broader understanding of the issues and options involved and thus makes a better, evidence-informed decision.

To illustrate, we may be considering introduction of a virtual reference desk alongside (or even as an alternative to) traditional face-to-face reference services. We could conduct a series of rapid searches to look at the context within which such services are being considered together with their claimed advantages and limitations. We could seek to identify a range of proposed models, such as e-mail or chat-based reference service, in parallel to existing services or as a means of extending availability across time or geographic space. We could look at qualitative data reporting staff or reader views of such services. We may identify published evaluations that have examined implementation of such services. While recognising that results may be context-specific, we may learn a considerable amount about pertinent issues and possible metrics for success. Of course if

the fruits of our labours are particularly productive, we will naturally encounter any rigorous studies with the potential to answer that important 'effectiveness' question. More importantly, however, if we do not find any sufficiently rigorous studies, we still have a considerable body of evidence to inform our pragmatic decision. We have not allowed the ideal to be the enemy of the good.

These **Route** maps for Evidence based problem **Solving** (tentatively assigned the working title "**RESolve**") become living organic documents to be shared, edited, and augmented as other colleagues bring additional insights to bear. Unlike systematic reviews, they require little technical knowledge either to interpret or to use in practice. They can be locally owned, adapted and modified. Where rigorous studies or systematic reviews do exist, these underpin specific nodes on the mind map or concept map that address very focused questions.

The Way Forward?

Cynics may identify this suggestion as yet another attempt to breathe life into a paradigm that continues to fit uncomfortably within library and information practice. Evidence products such as guidelines (Booth "From EBM to EBL"), critically appraised topics (Booth "Research"), and systematic reviews (Booth "Health Librarians") have been proposed as evidence based tools to address the research-practice gap within our profession. While the visual format of these Route maps reflects established techniques of concept mapping, their theoretical base draws on Realist Synthesis (Pawson et al.). However, the context for their use is far more pragmatic and 'front-line' than the originators of Realist Synthesis ever envisaged. Producing an accumulating body of knowledge that requires little technical knowledge, acknowledges uncertainty, and presents key messages in an easily navigable

format offers the potential to make library and information professionals 'teachable' and the products of their evidence syntheses 'readable'!

Note

* In this context a diorama is "a model which shows a situation . . . in a way that looks real, because the height, length, and width of what is being shown are accurately represented in comparison with each other."

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