

## 2009 International Campbell Collaboration (C2) Colloquium

---

### Submitter Information

Robert Sandieson  
Email: sandie@uwo.ca

### Abstract Information

**Abstract Title:**

Effectively and Efficiently Locating Research Evidence: Pearl Harvesting Information Retrieval

**Format:**

Paper

**Themes:**

1. how the social and medical arenas interrelate 2. encourage the building of a world library of systematic reviews 3. improvements in poor countries

**Authors:**

Robert Sandieson, Ph.D. University of Western Ontario (Canada)

**Abstract:**

The proposed presentation addresses the pernicious problem of retrieving relevant evidence-based research from amongst the volumes of non-relevant information. A newly developed methodological framework for searching, Pearl Harvesting, was tested and validated. The advent of inexpensive digital storage has facilitated a burgeoning of research information. However, accessing pertinent information from the vastness of non-relevant information often eludes even the most experienced searchers (Curan & Adams, 1999; Recoupero, 2007). Traditional search strategies, such as citation/author tracking, and large scale browsing remain highly intuitive, cumbersome, and sometimes inefficient (Rudner, 2000). Keyword searching has become popular (Boyce, King, Montgomery, & Tenopir, 2004), yet variations in terminology over time, across cultures, and different professions (Sandieson, 1998) limit the use of keywords for comprehensive searching. The Pearl Harvesting methodological framework (Sandieson, 2006) proposes a simple but highly effective solution to keyword searching. That is, an analysis of the terminology used in a sample of published studies (or pearls), across disciplines yields the linguistic gateways to the larger body of interdisciplinary research evidence on a specific topic. The resulting list of relevant terms can then be used as a keyword collection, strung together to achieve a high level of search recall and precision. The present investigation undertook a test of Pearl Harvesting to find a comprehensive list of keywords that could be used to search the field of Intellectual Disabilities. This is one of the most vulnerable groups of any population, and a group particularly at risk socially and medically within developing countries. The cross disciplinary and cross cultural nature of this field results in an inherent confusing array of terminology that might be used as search keywords. Pearl Harvesting methodology located numerous potential keywords, but through its prescribed steps 21 truncated terms were essential for literature searching. Validation consisted of a comparison with a published journal article that attempted to identify all meta-analyses in this field (Mostert, 2003). 47% more meta-analyses were found with Pearl Harvesting, using the same criteria as the published study. The use of the Pearl Harvesting framework may facilitate researchers in their quest for the most complete compilation of evidence on a topic, helping to fulfill the present colloquium claim, "Better Evidence for a Better World". Furthermore, once identified, topic specific keyword lists can be shared (literally cut and pasted) to empower those without the resources to fully explore research databases. References (Abbreviated) Boyce, P., King, D.W., Montgomery, C., & Tenopir, C. (2004). *The Serials Librarian*, 46,121-141. Curan, C. & Adams, D. (1999). *American Libraries*, 30(10), 46-49. Mostert, M.P. (2003). *Education and Training in Developmental Disabilities*, 38, 229-249. Recoupero, D.R. (2007). *Information Retrieval*, 10, 563-679. Rudner, L. (2000). *D-Lib Magazine*, 6(5), 1-14. Sandieson, R. (1998). *Education and Training in Mental Retardation and Developmental Disabilities*, 33, 290-295. Sandieson, R. (2006). *Education and Training in Developmental Disabilities*, 41, 401- 409.

---