Sandieson, R. (2006). Pathfinding in the research forest: The pearl harvesting method for effective information retrieval. *Education and Training in Developmental Disabilities****,* 41(4), 401-409.**

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Educators, particularly those involved in special education, have increasingly been turning

towards evidence-based research for decisions and policy making. It is often necessary to actually

locate the original research and not rely on a textbook quoting that research to obtain an unbiased

view. Despite this trend, there has been little guidance to enable educators to properly search and

locate pertinent, quality research. With the proliferation of information available over the Internet,

it has actually become more difficult for educators without research training to weed out that which

is appropriate,relevant, scholarly research. They also do not know how to do a comprehensive

search that will result in the best findings. Much of this problem stems from an inability to

formulate the proper keywords to use in searching.

Pearl building or growing is a search strategy that has become popular in the information science field. Once a relevant article is located, its descriptor keywords are then used to search for other articles. As subsequent articles are located, the descriptors keywords are in turn taken from those articles until no new, relevant keywords are found. This method, however, may involve many iterations of searching and can often continue ad infinitum without complete confidence that every possible article has been located. It is often very haphazard.

The goal of the researchers was to develop a method of devising an exhaustive list of key terms that can be used to search databases precisely and comprehensively. This approach is known as the pearl harvesting method. It differs from pearl building in that rather than building a list of key terms as research progresses, the list is prepared before commencing the research. The first step of the pearl harvesting method is deriving the list of key terms. This is accomplished by taking the key terms from a sampling of articles taken from either a meta-analyses or a major journal in the field. The second step involves using the list of key terms to search the appropriate databases to determine the number of relevant citations found. Different terms yielded resulted in varying degrees of precision that often depended on the database being searched. The third step was to check for comprehensiveness. The results were compared with those found by an expert in the field to determine this. (An actual expert was not used, instead a comprehensive literature review was located) The key terms used by this method and by the expert were also compared. The pearl harvesting method had actually found more appropriate results than the expert.

The article used the pearl harvesting method to find articles relating to teaching

mathematics to the mentally disabled. The terms used to refer to the mentally disabled population were actually taken from another study and proved not to be comprehensive. Future research would focus on determining the appropriate wording to use to refer to various different populations. Additional research could also focus on informing researchers and educators which journals could be used to compose the list of key words in the varying different fields. Educators, specifically, who are not research oriented might not even know where to start looking for key terms.