

Web of Science Analysis: Practice Exercise

(1) You are interested in the use of computer technologies for professional development. Analyze your topic briefly and record your search statement here:

Issues to be aware of:

- Professional development as an exact phrase (e.g., in quotes), are there other relevant terms?
- Terms and synonyms for technology—many terms, use OR, also be aware of truncation and phrase searching.

(2) Search the Web of Science database with this search statement:

"professional development" AND (comput* OR online OR technolog* OR web OR internet)

(3) Scan the first 10-20 or so results, what do they suggest to you about this topic? Is it very focused or diverse? What about variables, such as methods or populations, do you see any possible trends or patterns?

These results look very heterogeneous—there are obviously several different populations or professions that are the subject of research in this area, e.g., medicine, teachers. It might be worthwhile to make the search statement more focused.

(4) Sort your results by times cited. What are the top 3 results? Can you suggest reasons why these articles are highly cited?

1--Title: Strategies for improving teaching practices: A comprehensive approach to faculty development

Source: ACADEMIC MEDICINE Volume: 73 Issue: 4 Pages: 387-396 Published: APR 1998
Times Cited: 143

2--Title: The impact of the 80-hour resident workweek on surgical residents and attending surgeons

Source: ANNALS OF SURGERY Volume: 243 Issue: 6 Pages: 864-875 Published: JUN 2006
Times Cited: 63

3.--Title: Enacting project-based science

Source: ELEMENTARY SCHOOL JOURNAL Volume: 97 Issue: 4 Pages: 341-358 Published:
MAR 1997

Times Cited: 50

There doesn't seem to be anything obvious, although medical-related topics are often more highly cited.

(5) Analyze your results by author, institution, and source.

Important note: Remember the default is to analyze only the first 500 records, so you need to change this if you want to analyze the whole set of 650+.

(a) What are the top authors?

KRAJCIK, JS	6
MARX, RW	6
BLUMENFELD, PC	5
SOLOWAY, E	5

(b) What are the top institutions?

UNIV MICHIGAN	14
INDIANA UNIV	13
UNIV TORONTO	13

(c) What are the journals that publish most on this topic?

COMPUTERS & EDUCATION	25
ETR&D-EDUCATIONAL TECHNOLOGY RESEARCH AND DEVELOPMENT	16
TEACHING AND TEACHER EDUCATION	15

(d) What do these results look like? Why do you think they look this way?

Analyze, especially for authors and institutions works best if the topic is well-characterized and distinctive. These results don't really show any outstanding authors or institutions, perhaps because the subject is so heterogeneous.