



USING RESEARCH IN TEACHING PRACTICE

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Evidence based practice (definition)

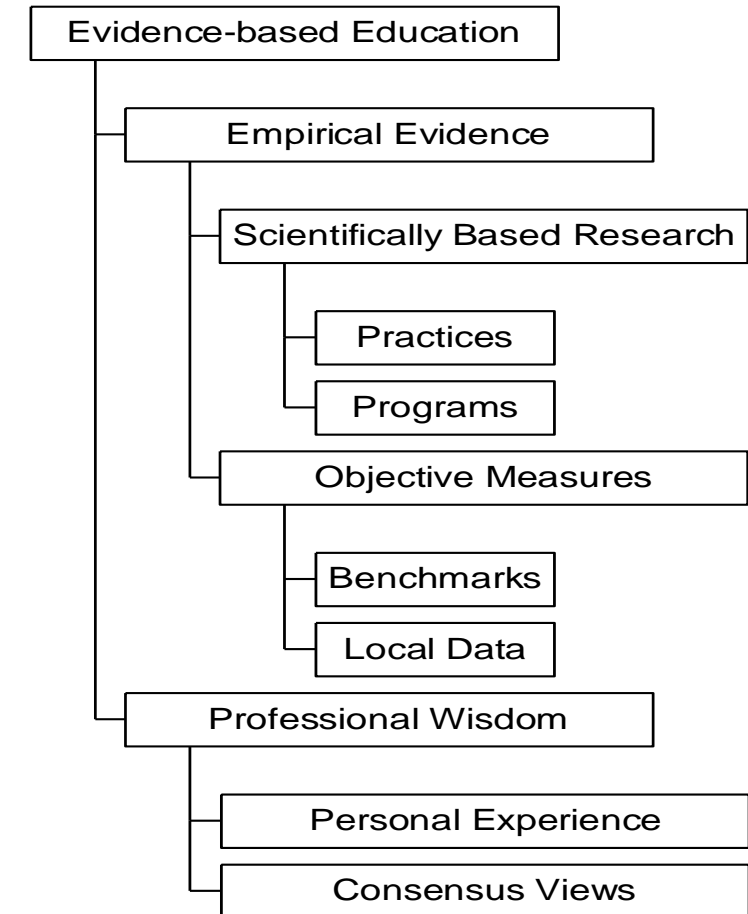
Evidenced-based practice is the integration of **professional wisdom** with the best available **empirical evidence** in making decisions about how to deliver instruction

Without **professional wisdom** education cannot

- adapt to local circumstances
- operate intelligently in the many areas in which research evidence is absent or incomplete.

Without **empirical evidence** education cannot

- resolve competing approaches
- generate cumulative knowledge
- avoid fad, fancy, and personal bias



Source: Whitehurst GJ. Evidence-Based Education. United States Department of Education. 2002 (powerpoint presentation) Online:<http://www.ed.gov/offices/OERI/presentations/evidencebase.ppt> - 277504 bytes - Fri Mar 15 12:15:53 EST 2002

What are the benefits of educational research for teachers?

- help you find solutions to particular problems arising in your classroom or school
- underpin professional learning of knowledge, skills and understanding
- connect you with sources of information and networks of professional support
- clarify purposes, processes and priorities when introducing change – for example, to curriculum, pedagogy or assessment
- improve understanding of your professional and policy context, organisationally, locally and nationally, enabling you to teach and lead more strategically and effectively
- develop your agency, influence, self-efficacy and voice within your own school and more widely within the profession.

List of reliable sources

(still needed to be read critically)

- Books/monographs—authored, reviewed, edited and published
- Peer reviewed/scholarly journals and articles
- PhD dissertations and research
- Isolated studies or academic research
- Certain web pages



The
Reliable
Source

How to choose reliable resources

Web pages and online organizations:

➤ URL's ending:

- **.edu** = most likely an educational institution (evethough be aware of potential political bias)
- **.gov** = most likely a reliable government website (usually provide good sources for statistics and objective reports)
- **.org** = usually a non-profit organization (quality varies; it is recommended to research their possible agendas and biases, if they exist)
- Websites known to be authorities on the subject (like, UNICEF for children welfare).

Online journals and magazines:

- Reliable journals and magazines should contain a bibliography for every article
- Lists sources within that bibliography that can be extensive and should include scholarly, and non-Internet sources

How to **not to choose unreliable** resources

These sources require confirmation with a reliable source:

- Blogs, tweets
- Personal websites
- Forums
- Sites created by organizations that may have political or biased agendas
- Sites that provide biased information
- Self-published sources
- Opinionated articles such as editorials

Unreliable source - RED LIGHTS

Anonymity: the author of the article is not mentioned

Negative reviews by other sources

Vague or sweeping generalizations: (*„Many people would acknowledge that this intervention is beneficial.“*)

One-sided viewpoint that does not address the view of the other side

Overclaims (*"Thousands of cars are stolen every day in the Czech Republic."*)

Sweeping statements of excessive significance (*"This is the most groundbreaking idea ever conceived!"*)

Conflict of Interest (*"Welcome to the Old sailor Rum factory. To read our report, ‚Rum will make you healthier,‘ click here."*)

Numbers or **statistics presented without an identified source**

Absence of source when this one is clearly needed

Any other sources that present the same information or acknowledge that the same information **exists**

Why wikipedia is not a reliable source?

Wikipedia is a free online encyclopedia. Which is very valuable for a common reader. But to be free it is largely written by anonymous volunteers who write without pay. That means that anyone (even without a thorough knowledge or full understanding of a topic) can write and make changes to Wikipedia articles.



Academic journals (definition)

Periodical publication in which scholarship related to a particular academic discipline is published. Academic journals serve as forums for the presentation and discussion of the research.



Professional publishers

Elsevier

Pergamon Press

Springer Verlag

J Wiley & Sons

Kluwer Academic Publishing

Blackwell

Taylor & Francis

Academic Press

Academic journals

(also scholarly/ peer-reviewed journals)

CORE CHARACTERISTICS:

Authors: experts and professionals, most often clearly associated with academic/research or other institution

Audience: articles targeted to professionals

Reference list: a list of sources is included at the end of each article

Content: evidence/research based

Format/structure: usually more structured (abstract, literature review, methodology, results, conclusion)

Language: high level, serious tone

Length: usually longer articles; in depth analyses

Peer review policy: articles are reviewed for their accuracy before publication by peer experts in the field

Academic journals

(terminology)

Impact factor – This ranking establish prestige of the journal. It is a measure of frequency with which the average article in a journal has been cited in a particular year. There are other quantitative measures of prestige, such as the overall number of citations, how quickly articles are cited, and the average "half-life" of articles.

Open access journal - scholarly journal that are available in an online form to the reader without any financial, legal or technical barriers

Volume – number of years publication has nbeen circulated

Issue – how many times periodical has been published during specific year

How to find quality article:

- Search in specialist databases (Scopus database, Science direct database etc.)
- Limit searches for „peer-reviewed“ and „scholarly“ journals
- Use Google scholar „cited by“

Academic journals

(Quality journals in field of Educational Psychology)

Journal of Educational Psychology (USA)

Contemporary Educational Psychology (USA)

Educational Psychologist(USA)

Educational Psychology Review (USA)

Review of Educational Research(USA)

American Educational Research Journal(USA)

British Journal of Educational Psychology (GB)

Educational Psychology in Practice(GB)

Psychologie in Erziehung und Unterricht(Germany)

Revue de psychologie de l' éducation(France)

European Journal of Psychology in Education (Portugal)

Useful questions during reading of any source

- Who is the author? What qualifies him/her to speak on the subject?
- Who is sponsoring this website/article? Are any biases at play?
- Where did she/he get this information? *Is it balanced?*
- *Does the author provide references or sources for data or quotations?*
- Can I verify this information from another source?
- When was the article published?
- Has it been updated recently?
- *How recent is the information? Is it current enough for my topic?*

Useful and inspirational sources

➤ **Evidence-based Practices in Instruction**

<https://ccrs.osepideasthatwork.org/teachers-academic/evidence-based-practices-instruction>

Free online education module

➤ **Using Research and Reason in Education: How Teachers Can Use Scientifically Based Research to Make Curricular & Instructional Decisions**

https://www.nichd.nih.gov/publications/pubs/using_research_stanovich

Very inspirational article