How to be a consumer of research

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- 22nd year in education
- BS Elementary Education
- M.Ed. Dyslexia Therapy
- Ed. S. Instructional Leadership
- Teacher general and special education
- Professional Development Provider
- Founder and Director of Illuminations Center for Dyslexia in Meridian, MS

Trudy Little

- 20th year in education
- BS Education ECE
- MS Teacher Leadership
- PhD in progress Special Education
- Teacher general and special education
- Trainer & Coach
1. Find sources of evidence
2. Begin to be good consumers of research,
3. Find evidence-based practices
4. Collaborate with researchers

Why should you learn how to read research?

- L9: Leaders develop and implement evidence-based professional development system.
- If you are in the position to choose curriculum, developing a healthy skepticism will serve you well.
- A8: Practitioners use clinical reasoning in addition to assessment results to identify the child’s current levels of functioning and to determine the child’s eligibility and plan for instruction;
- If you have a student with weaknesses within a domain, research can help find solutions for that problem.
Where do I start?

Where can you locate research-based practices?

- What Works Clearinghouse
- ERIC
- EBSCO
- University libraries
- Science.gov
- ResearchGate.net
- PubMed
- DEC membership
- NAEYC membership
- BACB membership
Cause & Effect = manipulation of IV on DV

Correlation ≠ Causation

Who funded the study? Do they have a suspiciously special interest in the outcome?
- Institute of Education Sciences (IES)
- National Institutes of Health (NIH)
- Centers for research (Mathematica)
- Versus “Self” Researched
Grey literature refers to a large number of publications produced by organizations for various reasons. It includes research and project reports, annual or activity reports, theses, conference proceedings, preprints, working papers, newsletters, technical reports, recommendations and technical standards, patents, technical notes, data and statistics, presentations, field notes, laboratory research books, academic courseware, lecture notes, evaluations, and many more.

Study designs reviewed by peers meet IES standards.

Peer review means that the article is reviewed by experts in the field and that the authors are required to respond to their comments. The aim of peer review is to ensure that the research is of high standard.

Evidence of Effectiveness

The evidence of effectiveness is based on the results of various studies, including randomized controlled trials, meta-analyses, and systematic reviews. This evidence is used to inform policy and practice and to guide future research.
Reviewed Research

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The Wilson Reading System is a reading and writing program. It provides a curriculum for teaching reading and spelling to individuals of various age groups and reading levels. The program is designed to improve reading, writing, and spelling skills, as well as vocabulary and comprehension. The system is structured to progress from phonemic awareness to reading and writing skills, and seeks to improve sight word knowledge, fluency, vocabulary, and expressive language development, and reading comprehension.
An example: Wilson Reading System uses direct, multisensory structured teaching based on the Orton-Gillingham methodology. Based on 10 principles of instruction, the program teaches sounds to automaticity; presents the structure of language in a systematic, cumulative manner; presents concepts within the context of controlled and noncontrolled written text; and teaches and reinforces concepts with visual-auditory-kinesthetic-tactile methods.

- Steps 1 through 6 establish foundational skills in word reading while Steps 7 through 12 present more complex rules of language, including sound options, spelling rules, and morphological principles.
- Students assigned to the word-level condition in this study.
- Comprehension and vocabulary components deleted from training and instruction and all students progressed to somewhere between Steps 4 and 6.

Participants

- 772 participants
- 50 schools in PA
- 3rd & 5th graders
- Struggling readers per teacher
- <30th percentile on word-level reading
- >5th percentile on vocabulary
- 45% free & reduced lunch
- 27% AA, 73% W, <2%Hisp
- 33% learning disabled
Setting

Where/how are services delivered?

- Small groups
- 3 students
- Matched level in groups (as much as possible)
- 5 days a week

Procedure

1. What were the interventions?
2. What were the settings?
3. How often was the intervention provided?
4. What remedial instruction did the control groups get and how much?

1. Spell-Read, Wilson Language, Corrective Reading, and Failure-free Reading (p. ix, x, 29)
2. Large group, small group, limited one-on-one. (p. 52)
3. 100 hours in 60-minute sessions, 5 days per week. (p. 30)
4. Diverse curricula, recorded number of minutes, no record of word-level or comprehension split. (p. 30, 52)

Implementers

1. Who provided the intervention?
   a. Characteristics?
   b. Training Time?
   c. Training Type
2. 69 hours of training
   a. 30 initial phase
   b. 24 practice phase
   c. 14 implementation phase
3. Face-to-face, coaching, consultations (phone), independent study
Method

- Scientifically rigorous design
  - Randomized Control Trial
    - Randomized assignment of schools to an intervention
    - Randomized assignment of students to intervention or control (no intervention for comparison)

Results for 3rd graders

- Was there an effect of treatment?
  - *Hint* look for significant results

  - 3rd grade
    - Treatment vs. Control
      - *All treatments scored significantly better on both DVs: word attack and word identification*
      - Word Attack significantly better
      - Spell Read
      - Wilson Read
      - Corrective Reading (& wd. id)

Results for 5th graders

- Was there an effect of treatment?
  - *Hint* look for significant results

  - 5th grade
    - Treatment vs. Control
      - *All treatments scored significantly better on 1 DV: Word Attack*
      - Word Attack significantly better
      - Spell Read
      - Wilson Read
      - Corrective Reading
Review of Evidence

★ Intervention
- Spell Read-
- Corrective Reading-
- Wilson Reading System-
- Failure Free-

★ Implementers
- GenEd Teachers
- 2 day training
- Sustained PD & independent study
- Coaching
- Consultation calls

★ Meets Standards
- Approved design
- Rigorous
★ Participants
- Pennsylvania 3rd & 5th
- 50 schools
- 47% FRL
- 27% AA, 71% W, <2% Hisp
- 33% LD

“Nearly every intervention can show some evidence of success, so we need to ask not “What works?” but “What works best” and seek comparisons between different ways of influencing student learning,… success looks like deep learning, (teachers) who provide appropriate levels of challenge and feedback, and who have aligned their claims about success, assessment, and teaching.”

Hattie!

Collaboration with higher education
- Investigate local universities online
  - Who is researching what?
  - Are there potential topics you’d like to learn more about?
  - Is anyone researching your preferred method/strategy?
- Volunteer to participate in a study
- Discuss potential PD opportunities with professors/staff working with professors


https://en.wikipedia.org/wiki/Grey_literature
https://ies.ed.gov/ncee/wwc/
https://www.wilsonlanguage.com/programs/research-results/