






RED FLAGS FOR EDUCATION RESEARCH (GROUP DESIGNS)

RED FLAG	WHAT IS IT?	EXAMPLES OF THE RED FLAG
Exaggerated Claims & Hyperbole 	Dramatic results, especially with low effort/short practices, require very strong evidence (for example, large samples), replicated across studies.	A paper describes how training working memory can result in large and permanent boosts to achievement for struggling students.
Lack of Meaningful & Measurable Criteria 	Researchers measure important skills (e.g., reading fluency, standardized achievement tests). They should report on the reliability of those measures. Interviews and other non-numerical data can be helpful, but high quality, numerical data should be the bases for conclusions.	A paper describing a math intervention draws conclusions from student interviews and observations of students completing a few problems.
Unusual Experimental Conditions 	Research should test instruction and interventions in classrooms and/or in small groups that resemble real classroom conditions.	A study reports on an intensive math intervention that occurs 1 on 1 by trained experts. The research was done in the authors' lab.
Weak Research Design 	Researchers use strong research designs. Look for words like, "control group" and "randomization." Weaker designs often describe their study as: "case", "descriptive", "observational" or "correlational." Stronger designs often measure effects repeatedly over time.	Researchers provide an intervention to a student, then report findings for only that student (case study). Researchers measure a student's learning style, and then explore differences in current achievement by style (correlational).
Questionable Citations 	Researchers cite other strong practice studies, including peer-reviewed studies and meta-analyses. Alternatively, questionable research may cite book chapters, blogs, presentations, literature reviews, or websites.	Claiming that exploratory learning is best for students, an author repeatedly cites Piaget, but few peer-reviewed research studies.

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