r2R.p THE Right TO Read Project

Research Terminology for the Classroom Teacher

Term	What It Is	Why It Matters
Sample Size	The number of students included in a study A larger sample (100+ students) generally gives us more confidence than a smaller one (8-10 students).	Classrooms typically have students with varying levels of language proficiency, decoding abilities, behavioral tendencies, etc. To know if a method is likely to work with our students, we need to know if similar students were included in the study.
Control Group	A group of students who didn't receive the new intervention Having a control group allows researchers to compare results. The control group might receive regular classroom instruction ("business as usual") or a different intervention.	A control group can help us determine if an intervention was more effective than another approach. When deciding whether to invest time and resources in a new approach, we want to know, "Would it be better than what we're already doing? Or is it just better than doing *nothing*?"
Baseline Levels	The performance of the students in the study before they had the intervention This includes information about their initial skills, challenges, and relevant characteristics.	Understanding baseline levels helps us know if the students in the study were similar to ours. If a program worked well for students who started at a different baseline than our class, we might not see the same results.
Intensity of Intervention	How much instruction students received (minutes per day, days per week) and in what setting (one-on-one, small group, whole class)	If we can't replicate the intensity of the intervention in our classroom, then we can't expect the same results as the study. It might not be worth spending 20 min twice a week to deliver an intervention that was intended to be given for 30 min, five times a week
Effect Size	A measure of how much impact the intervention had, usually expressed as a number like 0.2 (small effect) to 0.8+ (large effect).	We need to balance an effect size with its cost. For example, having students plan what they'll write before they draft has a smallish effect size of .32, but it doesn't require much effort and it may offer additional benefits, like giving us an opportunity to set writing goals with our students (.70). Well-worth it! When we're considering costly materials, intensive training, or an overhaul of our whole schedule, we want to know if big gains are possible.

Statistical Significance	Tells us whether results are just due to chance. (Usually marked with $p < .05$ or similar.)	An intervention can be statistically significant and still not be worth our time or energy. Statistical significance by itself doesn't tell us about practical importance.
Educational Significance	The practical importance of results in a real educational setting, which considers factors like cost, time, resources needed, and the actual impact on student learning	While statistical significance tells us if results aren't random, educational significance helps us decide if changes justify implementation.
Duration of Study	How long the research followed the students (weeks, months, years)	In addition to a post-test right after the intervention, good studies often follow the students to see how well their gains last. Looking at long-term impact can help us avoid expensive interventions that don't produce lasting benefits.
Outcome Measures	The tools used to measure success (standardized tests, curriculum assessments, teacher observations, etc.)	If an assessment measure is closely matched to the skill targeted by the intervention, big gains are more likely. For example, a phonics intervention might show large gains on DIBELS but smaller gains on a comprehension test because reading comprehension involves many skills beyond decoding.
Implementation Fidelity	The degree to which the intervention was delivered as intended	While we might think fidelity to an approach restricts teacher autonomy, it actually represents having the training, resources, and support necessary to implement a program effectively. Teaching with good fidelity means we're more likely to get results similar to the study.