

## Effect Size of Instructional Strategies

The best evidence for how effective an intervention is comes from experimental studies or studies that are replicated repeatedly. He then explained how effective size is determined (the mean for experimental condition minus the mean for the control condition divided by the standard deviation) and how to interpret it. For example, an effect size of 0.75 means that the average child in group 1 had a score of three-fourths of a standard deviation higher than the average child in group 2. If the measure was IQ, an ES of .75 would translate into a difference of more than 11 points.

Dr. Lloyd interprets effect size in the following way:

- 0.2 shows that the intervention is not very effective.
- 0.3 indicates that the intervention may warrant more researchers to conduct further study.
- 0.5 shows that the intervention is indeed effective and has real implications for teachers.
- 0.7 means that this practice is very effective and should definitely be utilized.

| <i>Type of Instruction</i>     | <i>Number of Studies</i> | <i>Overall Effect Size</i>                 |
|--------------------------------|--------------------------|--|
| Teaching Reading Comprehension | 48 studies               | 1.13                                       |
| Correcting Perceptual Problems | 180 studies              | 0.08 (academic effect size is 0.01)        |
| Modality-based Instruction     | 39 studies               | 0.144                                      |
| Direct Instruction             | 25 studies               | 0.82 (ES is greater for reading than math) |
| Mnemonic Instruction           | 24 studies               | 1.62 (ranges from 0.68 to 3.42)            |
| Social Skills Training         | 53 studies               | 0.21                                       |
| Reducing Class Size            | 77 studies               | 0.31                                       |
| Hyperactivity Diet             | 23 studies               | 0.118                                      |
| Using Peers as Tutors          | 19 studies               | 0.48                                       |
| Progress Monitoring            | 21 studies               | 0.7  |
| Early Intervention Programs    | 74 studies               | 0.68                                       |

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