

Effect Sizes

Effect size represents the magnitude of the impact that a given approach has. Hattie considers the effect size of 0.4 as the “hinge point” where an approach is working enough for a student to gain one year’s growth for a year of schooling. The following is an abbreviated list from *Visible Learning for Mathematics*.

Rank	Influence	ES
1	Self-reported grades/student expectations	1.44
2	Piagetian programs	1.28
3	Response to intervention	1.07
5	Providing formative evaluation	0.90
7	Classroom discussion	0.82
10	Feedback	0.75
13	Spaced versus mass practice	0.71
14	Metacognitive strategies	0.69
17	Vocabulary programs	0.67
21	Self-verbalization and self-questioning	0.64
23	Teaching strategies	0.62
24	Problem-solving teaching	0.61
29	Direct instruction	0.59
32	Worked examples	0.57
33	Visual perception programs	0.55
37	Student centered teaching	0.54
47	Professional development	0.51
53	Questioning	0.48
68	Mathematics programs	0.40
72	Enrichment	0.39
77	Computer-assisted instruction	0.37
82	Attitude to mathematics/science	0.35
86	Simulations	0.33
91	Inquiry-based teaching	0.31
94	Homework	0.29
98	Teaching test-taking	0.27
99	Use of calculators	0.27
109	Individualized instruction	0.22

Sources:

Hattie, J., Fisher, D., Frey, N., Gojak, L.M., Moore, S.D., Mellman, W. (2017). *Visible Learning for Mathematics*. Thousand Oaks, CA: Corwin Press.

<https://www.visiblelearningplus.com/content/research-john-hattie>