

Welcome Back!

January 2020

Agenda

- 8:00–8:30** **Breakfast & Welcome Back**
- 8:30–9:00** **PBIS Tier 1 with Data Updates & SWISS**
- 9:00–9:30** **PBIS Tier 2 Check in & Check**
- 9:30–9:45** **TKES Mid-Year Conference/Break**
- 9:45–10:15** **Effect Size/DOK Explaining strategies**
- 10:15–10:30** **Announcements**
 - January Updates, Benchmark & Data Requirements, Lunch & Learn/Data Night

Effect Size-Basics

- Based on research, what strategies have the most effect on student achievement?
- Some strategies affect student achievement at higher rates than others.
- Using strategies with higher effect sizes should increase student achievement.

Effect Size-Measured

- Research based on strategies being tested
- Statistical data based on the the standardized mean difference between to groups of study.
- Engage NY vs. Teacher made curriculum

Effect Size -Values

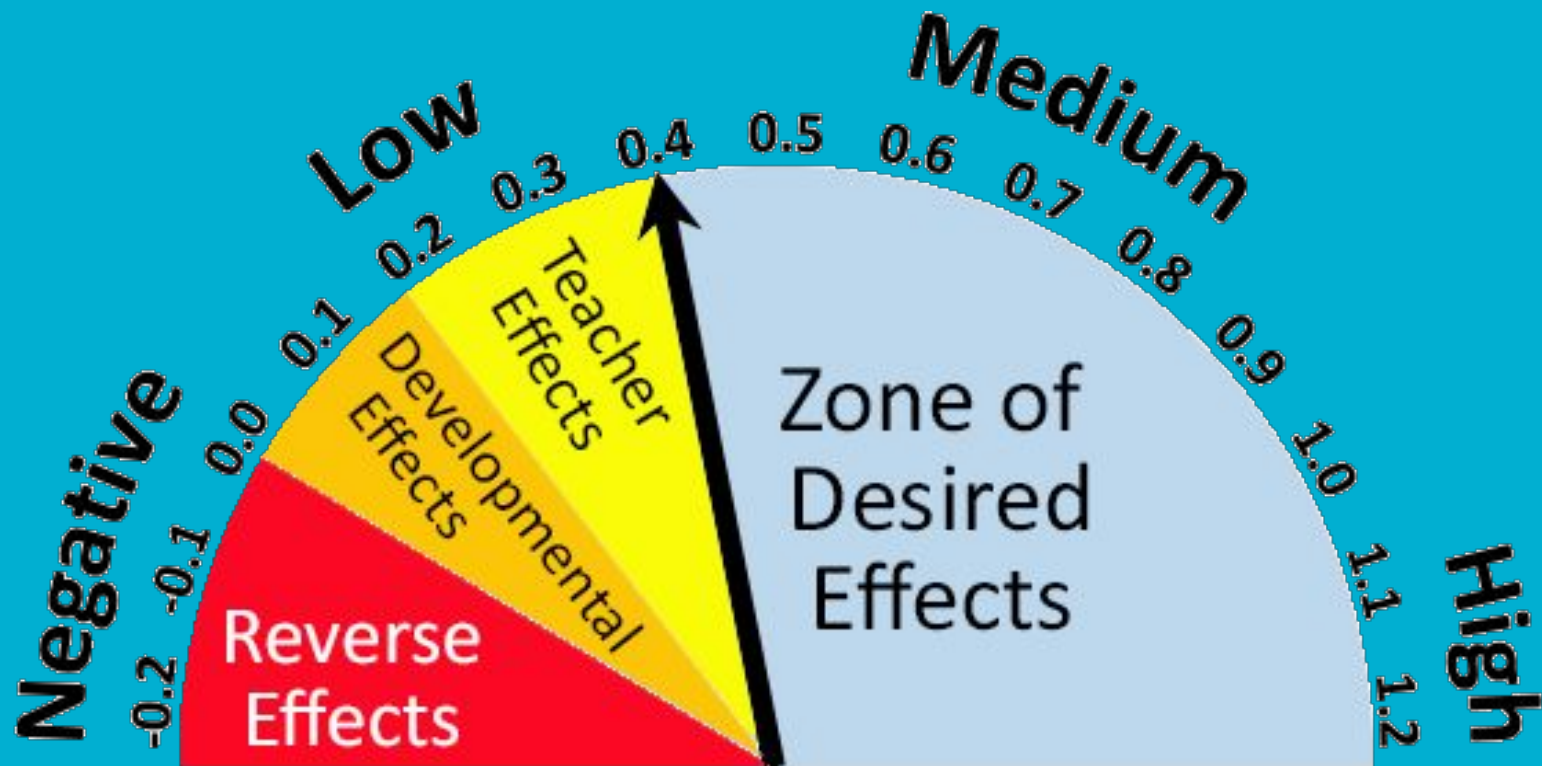
What is the goal?
What can be accomplished in
one year of teaching has an
effect size of .40.

Small: .20

Medium: .50

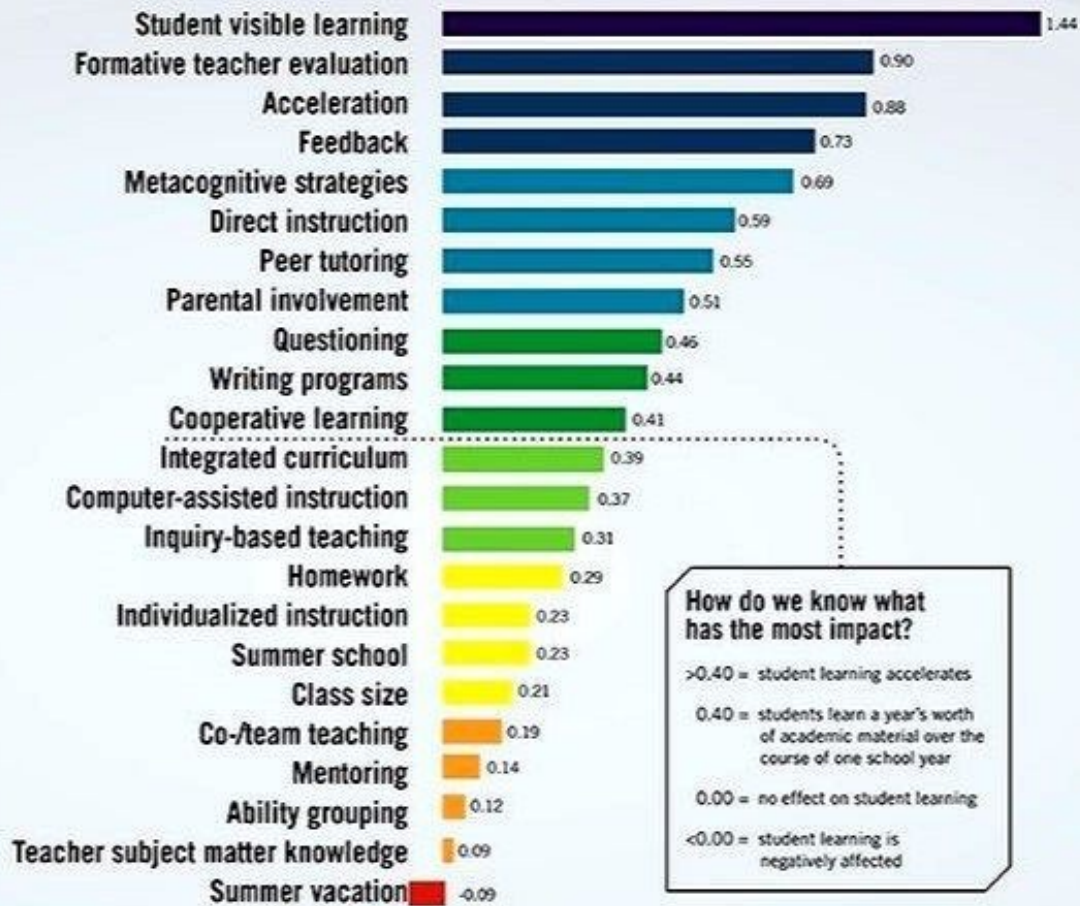
Large: .80

The barometer of Influence



Effect Size- Strategies

What Works ^{BEST} in Raising Student Achievement?













Effect Size--Strategies











▪ Reducing disruptive behavior in the class	.86
▪ Feedback	.72
▪ Acceleration of gifted students	.60
▪ Reading Recovery	.50
▪ Integrated curriculum programs	.40
▪ Homework	.30
▪ Individualized instruction	.20
▪ Ability grouping	.10
▪ Open vs. traditional classes	.00
▪ Retention (hold back a year)	-.16
▪ Shifting schools	-.34



Effect Size--Strategies

Rank	Category	Influence	Studies	Effects	ES
50		Enrichment on gifted	214	543	.39
49		Integrated curriculum programs	61	80	.39
48		Adjunct aids	138	323	.41
47		Hypermedia instruction	46	143	.41
46		Behavioral organisers/adjunct questions	577	1933	.41
45		Self-concept on achievement	324	2113	.43
44		Frequent/effects of testing	323	1077	.46
43		Early intervention	1627	9050	.47
42		Motivation on learning	322	979	.48
41		Small group learning	78	155	.49

Effect Size--Strategies

Rank	Category	Influence	Studies	Effects	ES
1		Self-report grades	209	305	1.44
2		Absence of disruptive students	140	315	.86
3		Classroom behavioural	160	942	.80
4		Quality of teaching	141	195	.77
5		Reciprocal teaching	38	53	.74
6		Prior achievement	3387	8758	.73
7		Teacher-student relationships	229	1450	.72
8		Feedback	1276	1928	.72
9		Providing formative evaluation to teachers	21	21	.70
10		Creativity programs	658	814	.70

Effect Sizes--Teachers

- Clear learning intentions
- Challenging success criteria
- Range of learning strategies
- Know when students are not progressing
- Providing feedback
- Visibly learns themselves



Effect Sizes--Students

- Understand learning intentions
- Are challenged by success criteria
- Develop a range of learning strategies
- Know when they are not progressing
- Seek feedback
- Visibly teach themselves



Surface Learning		Deep Learning		Transfer Learning	
Strategy	ES	Strategy	ES	Strategy	ES
Wide reading (exposure to reading)	0.42	Questioning ★	0.48	Extended writing/ writing programs	0.44
Phonics instruction	0.54	Concept mapping ★	0.60	Peer tutoring ★	0.55
Direct instruction ★	0.59	Close reading (study skills) ★	0.63	Problem-solving teaching	0.61
Note-taking	0.59	Self-questioning	0.64	Synthesizing information across texts	0.63
Comprehension programs	0.60	Metacognitive strategy instruction	0.69	Formal discussions (e.g., debates)/classroom discussion	0.82
Annotation (study skills)	0.63	Reciprocal teaching	0.74	Transforming conceptual knowledge	0.85
Summarizing ★	0.63	Class discussion ★	0.82	Organizing conceptual knowledge	0.85
Leveraging prior knowledge/prior achievement	0.65	Organizing and transforming notes	0.85	Identifying similarities and differences	1.32
Vocabulary instruction ★	0.67	Cooperative learning 0.59			
Repeated reading	0.67				
Spaced practice	0.71				

Webb's Depth of Knowledge--Why?

- Need to increase the level of rigor in the classroom
- Aligning rigor of standards, classwork, and assessments
- There can be a connection between depth of knowledge, Blooms, and Effect Sizes

DOK-Basics

DOK Level	Description of Level
1	Recall & Reproduction
2	Skills & Concepts
3	Strategic Thinking & Reasoning
4	Extended Thinking

DOK 1

Recall & Reproduction

Level 1 (Recall of Information)

- * Identify, list, or define something.
- * Questions may start with *who*, *what*, *when*, and *where*.
- * Recall facts, terms, or identify information.

Teacher Role

Questions to direct or focus attention, shows, tells, demonstrates, provides examples, examines, leads, breaks down, defines

Student Role

Recognizes, responds, remembers, memorizes, restates, absorbs, describes, demonstrates, follows directions, applies routine processes, definitions, and procedures

DOK 2

Skill/Concept

Level 2 (Basic Reasoning)

- * Think about things—it is more than just remembering something.
- * Describe or explain something.
- * Answer the questions “how” or “why.”

Teacher Role

Questions to differentiate, infer, or check conceptual understanding, models, organizes/reorganizes, explores possible options or connections, provides examples and non-examples

Student Role

Solves routine problems/tasks involving multiple decision points and concepts, constructs models to show relationships, demonstrates use of conceptual knowledge, compiles and organizes, illustrates/explains with examples or models, examines

DOK 3

Strategic Thinking & Reasoning

Level 3 (Complex Reasoning)

- * Go beyond explaining or describing “how and why.”
- * Explain or justify your answers.
- * Give reasons and evidence for your response.
- * Make connections and explain a concept or a “big idea.”

Teacher Role

Questions to probe reasoning and underlying thinking, asks open-ended questions, acts as a resource and coach, provides criteria and examples for making judgments and supporting claims, encourages multiple approaches and solutions; determines when/where (text, concept) depth and exploration is most appropriate

Student Role

Uncovers and selects relevant and credible supporting evidence for analyses, critiques, debates, claims and judgments; plans, initiates questions, disputes, argues, tests ideas/solutions, sustains inquiry into topics or deeper problems, applies to the real world

DOK 4

Extend Thinking

Level 4 (Extended Reasoning)

- * Complex thinking required!
- * Plan, investigate, or apply a deeper understanding.
- * These items will take more time to write.
- * Connect and relate ideas.
- * Show evidence by doing a task, creating a product, or writing a response.

Teacher Role

Questions to extend thinking and broaden perspectives; facilitates teaming, collaboration, self-evaluation

Student Role

Designs, takes risks, researches synthesizing multiple resources, collaborates, plans, organizes, and modifies, creates concrete tangible products

Announcements

1. January Calendar has been shared
2. Benchmark Requirements shared
3. Lunch & Learn/Data Nights