

3 questions to answer before we start

1. Where are you from?
2. How much do you know about Engelmann's Direct Instruction?
3. Have you ever heard of Project Follow Through?

Scroll through to answer all 3 questions



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Project Follow Through and Its Relevance Today

Dr. Bonnie Grossen, Senior Direct Instruction Author

Sponsored by:
The National Institute for Direct Instruction (NIFDI)



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Project Follow Through and Its Relevance Today

Forms of interaction:

- Polls
- Q & A
- info@nifdi.org



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Project Follow Through and Its Relevance Today

Topics:

1. Goals and Origins of Project Follow Through (PFT).
2. Scope and Structure.
3. Results and Implications.
4. Critique and Lack of Dissemination.
5. Significance Today



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Goals and Origins of Project Follow Through

Johnson’s War on Poverty 1964:

- Equal Opportunity Act (1964)
- Compensatory education
- Head Start preschool (1965)
- Follow Through (1967)

Extend Head Start into primary grades.



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Goals and Origins of Project Follow Through

Planned Variation Study:

- Sponsored Model Approach
- 22 models accepted
- "Service to children" became
- "Proving how well it works"
- "A horse race" (Zig)

Real goal was to justify expansion of funding.



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Scope and Structure of Project Follow Through

Participants:

- 180 low-income communities
- 750,000 children tested
- 22 models of instruction

Final evaluation 1976 after starting in 1967

Sponsors had time to perfect their implementation before evaluation



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Goals and Origins of Project Follow Through

Planned Variation Study:

- 9 models
- 3 types of focus:
 - Academic knowledge
 - Problem-solving
 - Self-esteem

All models were expected to be worthwhile.



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Program Focus: Academic

"Basic Skills": directly teach fundamental skills in reading, arithmetic, spelling, and language

Model Name (Sponsor)	Description / Goals
Direct Instruction (University of Oregon)	Engineered instruction: DISTAR
Behavior Analysis (University of Kansas)	Behaviorism: Behavioral objectives with token Economy and R+; Curriculum: Sullivan Programmed Phonics and DISTAR
Language Development (Southwest Lab)	Bilingual Education, Spanish-speaking children; teaching procedures not specified

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Program Focus: Problem Solving
 “Cognitive Conceptual”: develop skills for “learning to learn” and problem-solving skills

Model Name (Sponsor)	Description / Goals
Florida Parent Education (University of Florida)	Curriculum varied: trained parents as aides ½ in class, ½ at home; individualized instruction
Tucson Early Educational Model (TEEM; University of Arizona)	Children’s interests determined curriculum; Language Experience Approach (Whole Language); wholistic; constructivist
Cognitively Oriented Curriculum (High / Scope Educational Research Foundation)	DAP; based on Piaget; children scheduled their own activities; teachers=catalysts; constructivist

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Program Focus: Self-Esteem
 “Affective-Cognitive”: develop self concept and positive attitudes re learning, then learn how to learn

Model Name (Sponsor)	Description / Goals
Responsive Education (Far West Lab)	With self esteem and appropriate learning environment, learning happens; self-paced instruction
Bank Street (Bank Street College of Ed)	Develop self-image, creativity, coping skills, use language to express ideas; no curriculum
Open Education (Education Development Center)	Child initiates and terminates activities; stresses stimulating environment; heterogeneous grouping; self-respect

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Questions from the Field



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Scope and Structure of Project Follow Through

Parents selected the model for each community:

- Social services at all sites
- Most popular: DI and TEEM (20 sites each)
- Geographic area and ethnicity uncontrolled across models
- Some schools had no K

Annual evaluations occurred initially.



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Scope and Structure of Project Follow Through

Comprehensive Evaluation:

- Systematically varied education model
- Identify comparison groups that controlled for ethnicity, geographic location, income level.

Abt indicated comparison groups were quite equivalent.



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Scope and Structure of Project Follow Through

Strengths of FT:

- Sponsors were directly funded to do the training: walk their talk
- Schools received \$650 / pupil
- Uniform measures for all

No model could complain that there were not enough resources.



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Results and Implications of Project Follow Through

Measure	Model Goal
Raven's Coloured Progressive Matrices	Problem-solving "cognitive conceptual"
Coopersmith Self-Esteem Inventory	Self-Esteem "Affective-Cognitive"
Intellectual Achievement Responsibility Scale	Self-Esteem "Affective-Cognitive"
Metropolitan Achievement Test Battery	Academic "Basic Skills"



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Poll 2 Beliefs about Teaching

Answer 4 questions

1. Which ending most accurately represents your belief: Children learn beginning reading and math best when...
2. Teachers who teach by reading a script can be superior teachers. Agree or disagree?
3. Where does cultural bias come into play?
4. Which is more true about motivation?



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Results and Implications of Project Follow Through

Comparisons:

1. For each FT group, a non-FT equivalent comparison group was selected
2. Standardized tests (compare to national norms)



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Results and Implications of Project Follow Through

Final data set:

- 17 models finally evaluated
- 2 cohorts, each with 2 “streams”
Started in K or 1, ended in Gr3
- 9 models with > 3 sites in final

The final comprehensive eval of grade 3 performance included 15,741 children.



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Results and Implications of Project Follow Through

FT model vs comparison group:

- Local comparison and pooled comparison group
- Difference counted if both
 1. Statistically significant at >.05 level
 2. Difference greater than .25 SD
- Positive if FT exceeded non-FT; negative if non-FT exceeded FT.



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A comparison: Let's say...

- 100 comparisons of performance on problem-solving scales for a model.
- 25 comparisons did not meet criteria of statistically or educationally significant difference.
- 15 comparisons were negative, (favored the comparison school)
- 60 comparisons were positive (favored the FT model.)

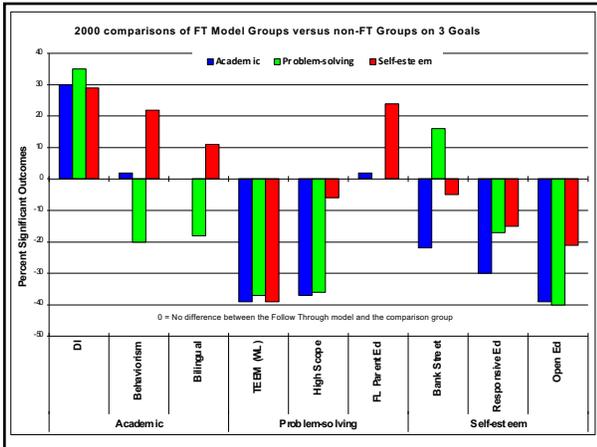


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Abt Report Conclusions:

- No problem-solving model got + results on problem-solving
- Models focused on self-esteem had - effects on self-esteem
- Academic models had + effects on self-esteem

Self-esteem is an outcome not a cause of academic success

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What do these results say about Beliefs about Teaching Poll?

1. Which ending most accurately represents your belief: Children learn beginning reading and math best when...

- a. ...they are presented with authentic experiences and allowed to respond naturally.
- b. ...the teacher presents systematic explicit instruction from lesson plans that have been tested and proven effective.**
- c. ...the teacher creatively responds to the individual needs of each child.



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2. Teachers who teach by reading a script can be superior teachers.

- a. I agree.**
- b. I disagree.



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Results and Implications of Project Follow Through

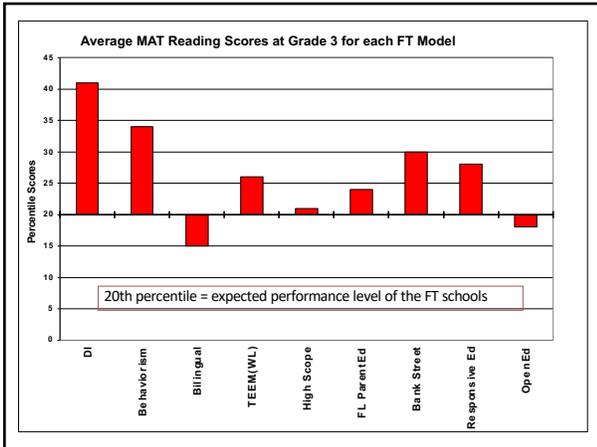
2. Comparison to National Norms:

Standardized norm-referenced tests (Metropolitan Achievement Test Battery)

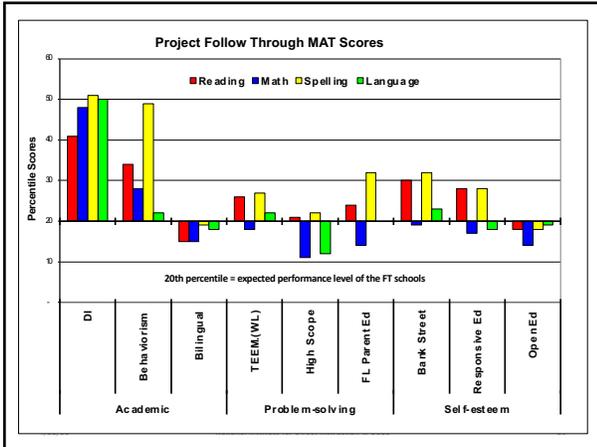


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What do these results say about Beliefs about Teaching Poll Q#3?

3. On a test of fractions, the black children in the class scored significantly lower than the white children in the class because...

- a. White children are smarter than black children.
- b. The test is culturally biased.
- c. The instruction was culturally biased.**

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Poll

4. Which is more true?

- a. Students who experience success are motivated to learn.
- b. Students who are motivated to learn will experience success.



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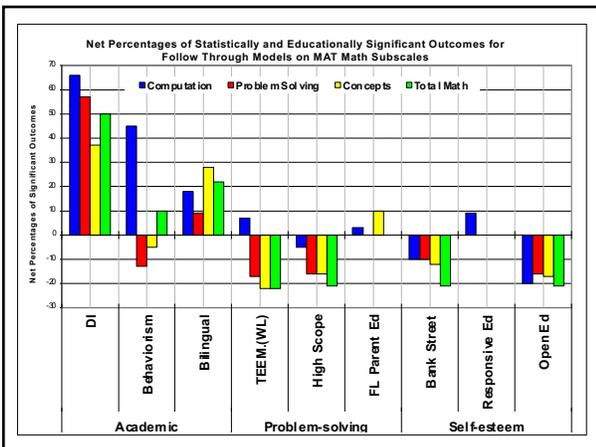
Results and Implications of Project Follow Through

More Findings:

- Difference between highest and lowest model was 3.6 SDs (Bereiter and Kurland)
- Most models resulted in lower scores than regular education



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Questions from the Field

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Results and Implications of Project Follow Through

Additional Findings:

1. K start cohort > Gr1
2. Low IQ children gained 17(9.2) IQ points
3. High IQ stayed high IQ
4. Low IQ=high IQ in academic gains

Sponsor findings (Becker & Engemann)

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Results and Implications of Project Follow Through

High School follow-up (N=5):

DI students better than comparison

- Academic (5)
- Attendance (3)
- College acceptance (2) (2x as many accepted)
- Reduced retention (3)

Sponsor findings (Becker & Engemann)

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Results and Implications

Sustainability (1980-81):
 12/12 districts rated exemplary

- Very large (New York, San Diego, Washington DC)
- Middle-sized (Flint MI, Dayton OH, E. St. Louis IL)
- Rural black (Williamsburg SC)
- Mexican American (Uvalde TX, E. Las Vegas NV)
- Native American (Cherokee NC)

Sponsor findings (Becker & Engelmann)



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Results and Implications

Additional Findings:

- Implementation fidelity predicts classroom achievement scores
- Initial Teacher (T) reaction negative
- At end of 2nd year Ts strongly supported DI
- > half Ts found in-class coaching most positive feature

Sponsor findings (Becker & Engelmann)



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Critique and Lack of Dissemination

Glass 1978 critique to Ed Dept:

1. Scientific method should not be used in education
2. Need ethnographic, case study approach
3. FT audience is teachers for whom research is irrelevant
4. No practice should be adopted as national policy.



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Critique and Lack of Dissemination

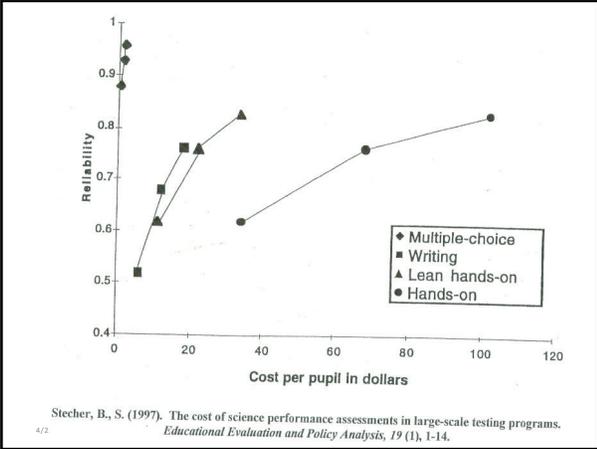
Most Important Outcomes Can't be Measured:

- Unmeasured competence may go in opposite direction of measured
- MAT measures favor rote learning

*Individual vs Program Evaluation
(program evaluation is simpler)*



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Significance of Project Follow Through Today

The failed models are still the most popular:

- Education for social justice
- Child-centered vs teacher-centered
- Informal vs systematic
- Individual needs vs task requirements



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Significance of Project Follow Through Today

Today's popular methods = the failed methods of FT:

- Curriculum is not important
- Building self-esteem is important
- Child-centered = democratic
- Teachers should create lessons
- Individualized instruction is better.



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Significance of Project Follow Through Today

direct instruction is as good as Direct Instruction:

- National Reading Panel: Effective instruction has these features.
- All dalmations have spots.

*If it has these features, it will be effective.
If it has spots, it's a dalmation.*



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Significance of Project Follow Through Today

- An array of constructivist models were used, most achieving negative effects. = Those models don't work.
- Little d, little i didn't work either.
- Only DI used an engineered curriculum and was successful. = Planned, engineered lesson plans
- You can't tell that it's effective by looking at it. You need tryout data and evaluation study data.



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**Popular belief:
Education for Social Justice**

Equitable and engaging teaching involves using open and engaging tasks

*Decolonizing Math is Rooted in a Decades-Old Conflict
Greg Ashman March 2021*



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Education for Social Justice

A scientifically proved vaccine for the education epidemic of inequality was denied to teachers

Bill Sowers, July 2020



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Summary

Today we covered these topics:

1. Goals and Origins of Project Follow Through (PFT).
2. Scope and Structure.
3. Results and Implications.
4. Critique and Lack of Dissemination.
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Questions from the Field

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Next

Next steps to understanding more about Direct Instruction: :

- Read about Follow Through on the NIFDI website (nifdi.org).
- View Bill Sowers webinar.
- Other info at nifdi.org

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Thanks for your interest in DI!

Back to Bryan
 DON'T FORGET TO FILL OUT AN EVALUATION FORM!

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