

## **Attachment 1**

### **Submission to the Inquiry into the Academic Standards of School Education, on the Importance of Evidence-Based Research, or Myth versus Reality in Education**

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#### **Project Follow Through: A United States example of how educators reject scientific evidence when this does not support their ideological beliefs**

The following summary of Project Follow Through is based on information provided in the paper by Professor Douglas Carnine (2000), as referenced below.

Project Follow Through was probably the largest educational experiment ever undertaken in the United States. It was a longitudinal study of more than twenty different approaches to teaching economically disadvantaged children from Kindergarten to Grade 3, and sought to determine the most effective approach to the teaching of these students. The study was undertaken over the period 1967 to 1976, with follow-ups continuing to 1995, and involved more than 70 000 students in 180 schools, with yearly data collected on 10 000 students.

Essentially the study compared the effectiveness of a number of education models which fell into two broad categories: models based on popular child-centred or constructivist approaches, which favour natural or discovery learning, and models based on a skills oriented teacher-directed approach using direct instruction. The child-centred programs were typically unstructured programs with students undertaking a variety of activities either individually or in small groups. The direct instruction programs were more structured teacher-directed programs, using small-group face to face instruction where the content and sequencing of lessons was carefully programmed and followed in a systematic way. These two models were compared with a control group of students from schools not participating in the experimental program.

The results of the study were quite clear. While the students participating in the child-centred models showed little improvement as compared with the control group, and even in some cases performed at a lower level than the control group, the students participating in the direct-instruction model showed very substantial gains as compared with the control students, with scores approaching or reaching national norms, not only on the student outcome measures (language, spelling, maths and reading), but also on the affective measure of self-esteem. This latter result was particularly surprising, given that the popular view is that child-centred approaches have more positive outcomes on self-esteem than the more structured direct instruction approach.

The point of this example is not so much the evidence favouring the direct instruction approach as against the child-centred approaches, important as this finding may be, but rather the educational community's response to these results.

Rather than leading to the adoption of the more effective direct instruction approach, as demonstrated by these findings, the response of the educational community was negative.

In one critique of the study, one noted education academic made the comment that 'an audience of teachers doesn't need statistical findings of experiments to decide how best to teach children. They decide such matters on the basis of complicated public and private understandings, beliefs, motives and wishes'.

There were calls for more descriptive ethnographic or descriptive case study approaches, and claims that a 'program could be judged effective if it had a positive effect on individuals other than students', these 'other individuals' presumably being teachers.

The models following the ideologically based child-centred approaches continued to be favoured and promoted, and even attracted further funding in an effort to improve the outcomes of these programs, while direct instruction programs were not promoted or encouraged, despite their proved effectiveness .

The same pattern of basing educational practices on ideological beliefs and assumptions and ignoring research which fails to support these practices remains strong in Australia, and this will constitute a serious obstacle to any effort to improve education outcomes through the adoption of more effective educational practices in Australia.

**Reference:**

Carnine, D. (2000) *Why Education Experts Resist Effective Practices (And What It Would Take to Make Education More Like Medicine)*. [www.edexcellence.net](http://www.edexcellence.net), accessed on 27 April 2007