



Books, buildings and learning  
outcomes: an impact evaluation  
of World Bank support to basic  
education in Ghana

Howard White

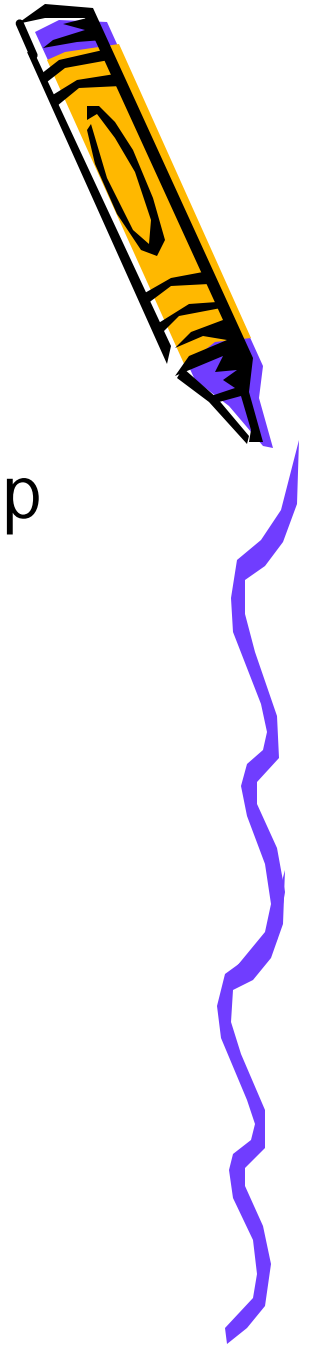
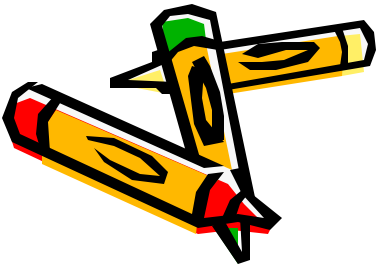
Operations Evaluation Department

World Bank



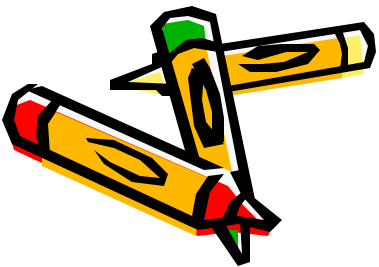
# Introduction

- First in a series of impact studies conducted under DFID-OED Partnership agreement
- Based on a follow-up to 1988 GLSS.
- Overview:
  - Method
  - Main outcomes
  - Tackling attribution
  - Conclusions



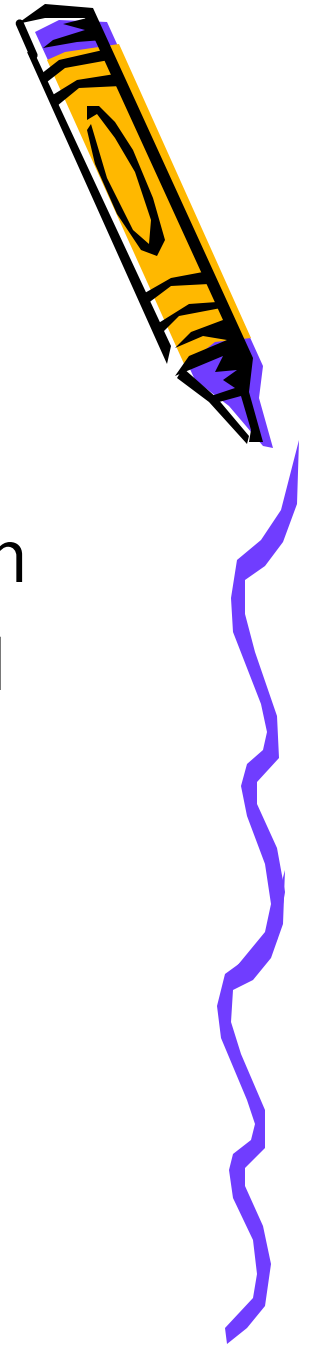
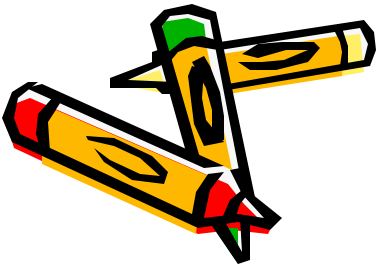
# But start from the bottom up

- Bottom line: building classrooms and supplying textbooks gets children into school and they learn something
- Ghana case shows need not be quantity versus quality. Rather investment in quality has led quantity improvements
- Also bottom up in that results from the field run counter to the 'view from the top'



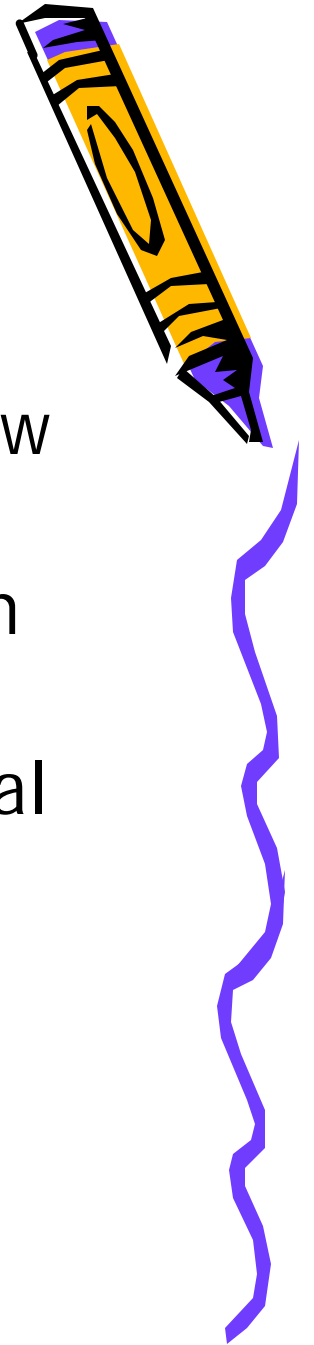
# A bit of context

- Education reforms
  - Restructure pre-University education
  - Reduce subsidies to second and third cycles
- These were not new reforms, but they had failed before.



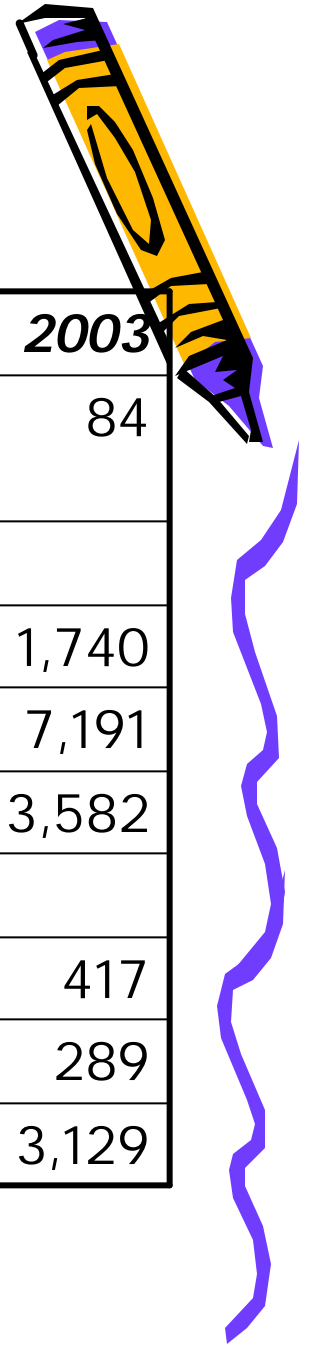
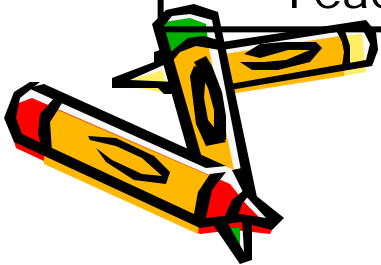
# Method

- Main data collection was survey to follow up GLSS2 from 1988 education module
- Combined with time spent in the field in three visits
- Background analysis: budget and political economy (context)
- Work in collaboration with MOEYS and GSS



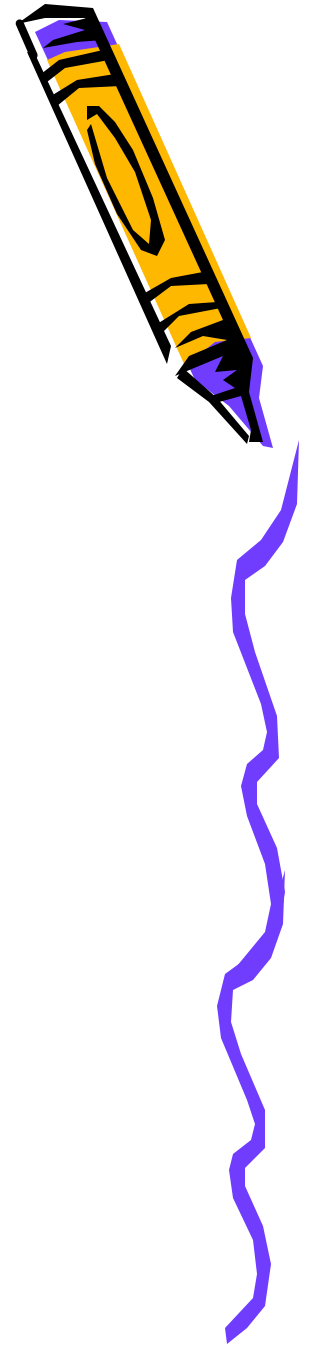
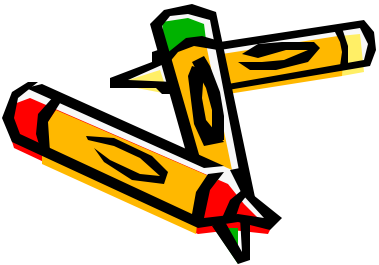
# The survey: coverage

	<i>1988</i>	<i>2003</i>
Clusters	170 whole survey 85 education module	84
Household survey		
Households	3,190	1,740
Individuals	14,924	7,191
Tests	3,718	3,582
School survey		
Primary	286	417
Middle/JSS	233	289
Teachers	0	3,129

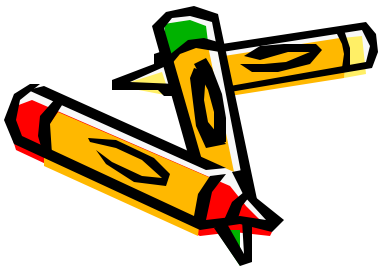
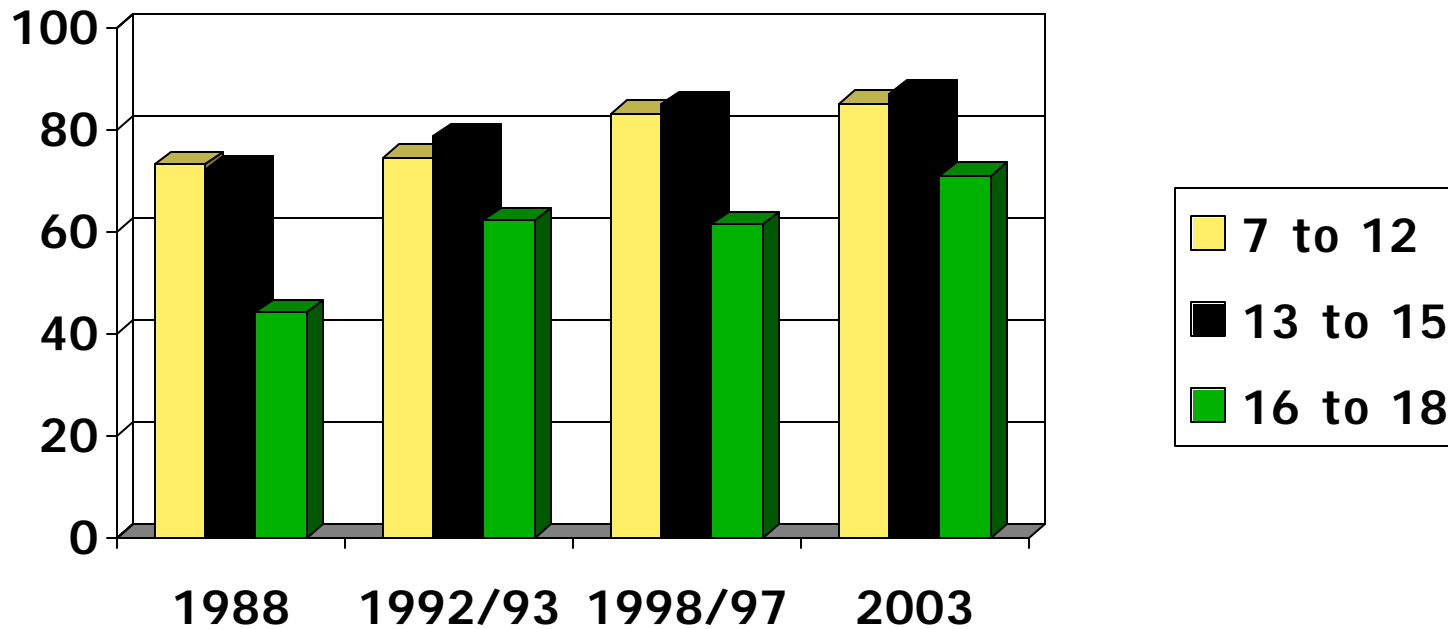


# Topics

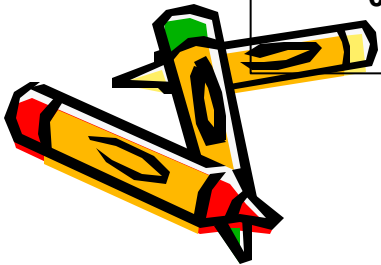
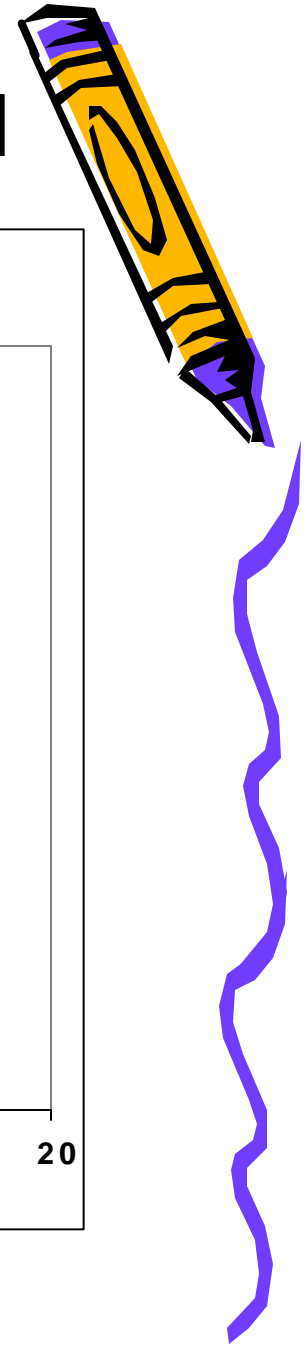
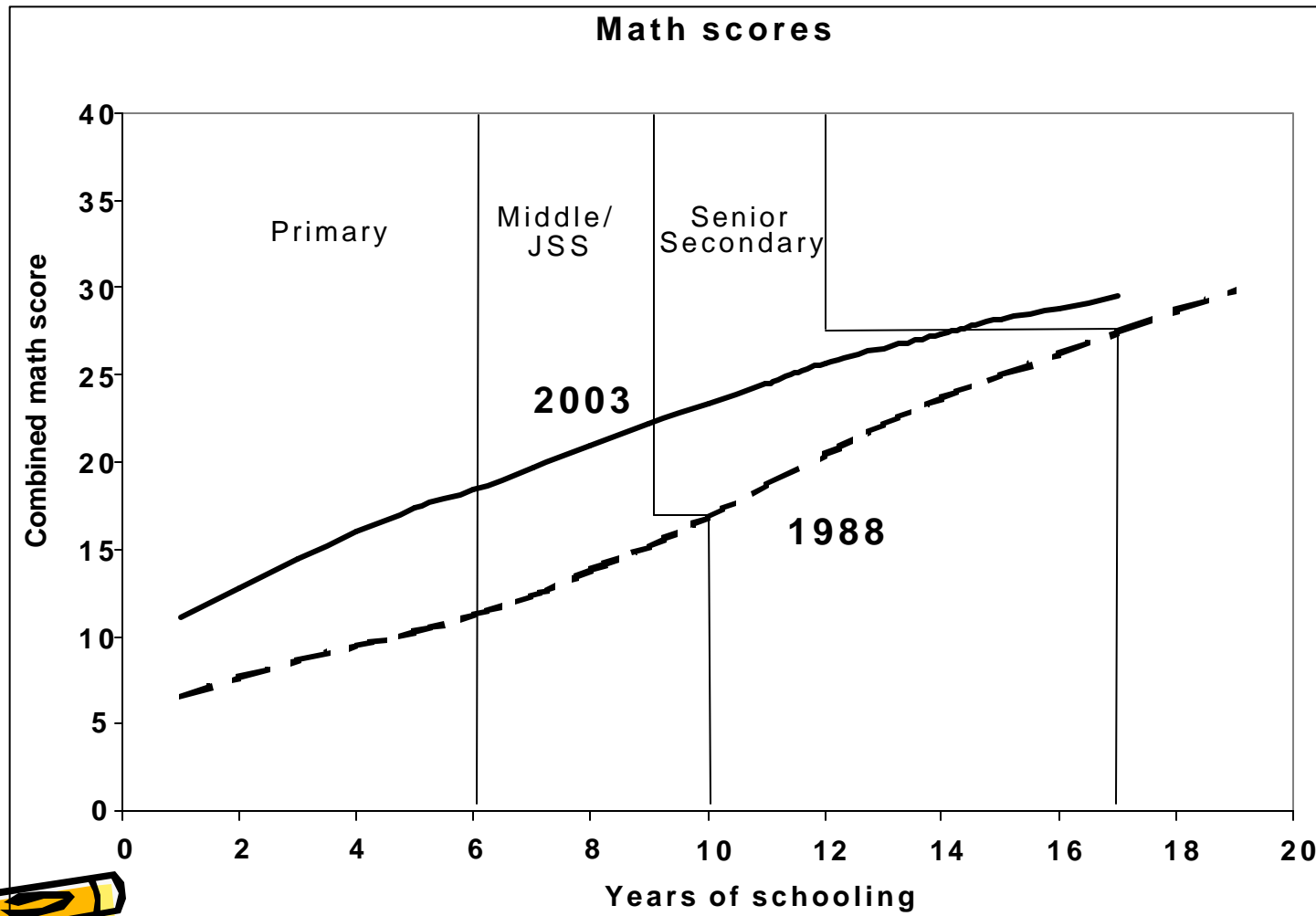
- Survey allowed coverage
  - Impact
  - School management
  - Teacher level variables
  - Discussion of data sources
- Importance of political economy



# Finding I : enrolments are rising

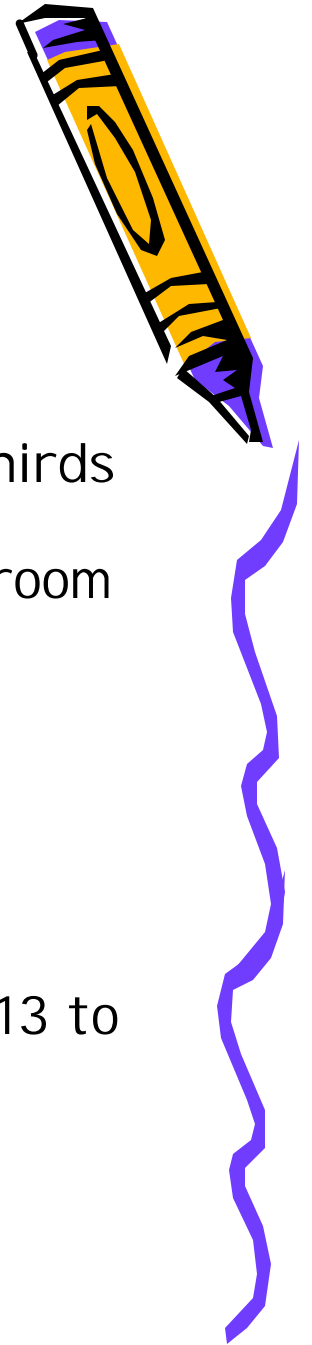


# Finding II: test scores have improved

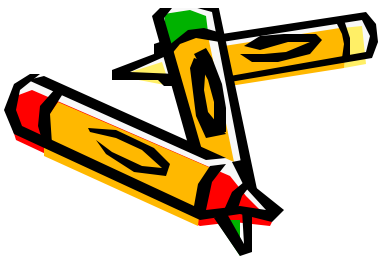
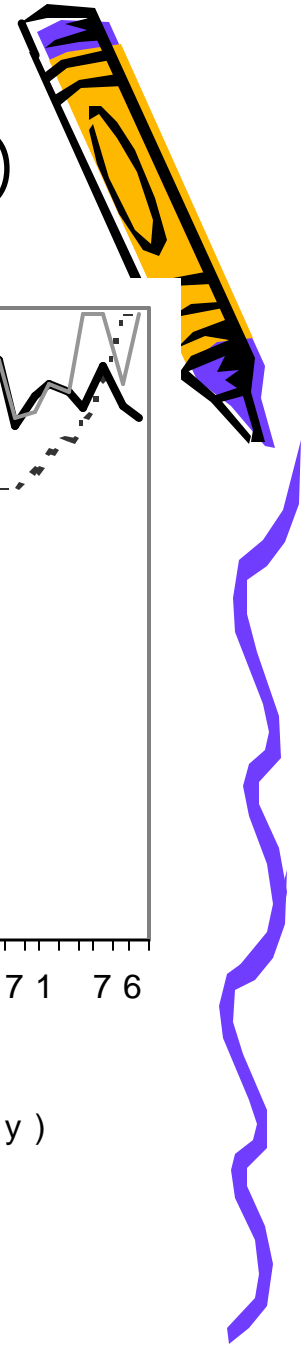
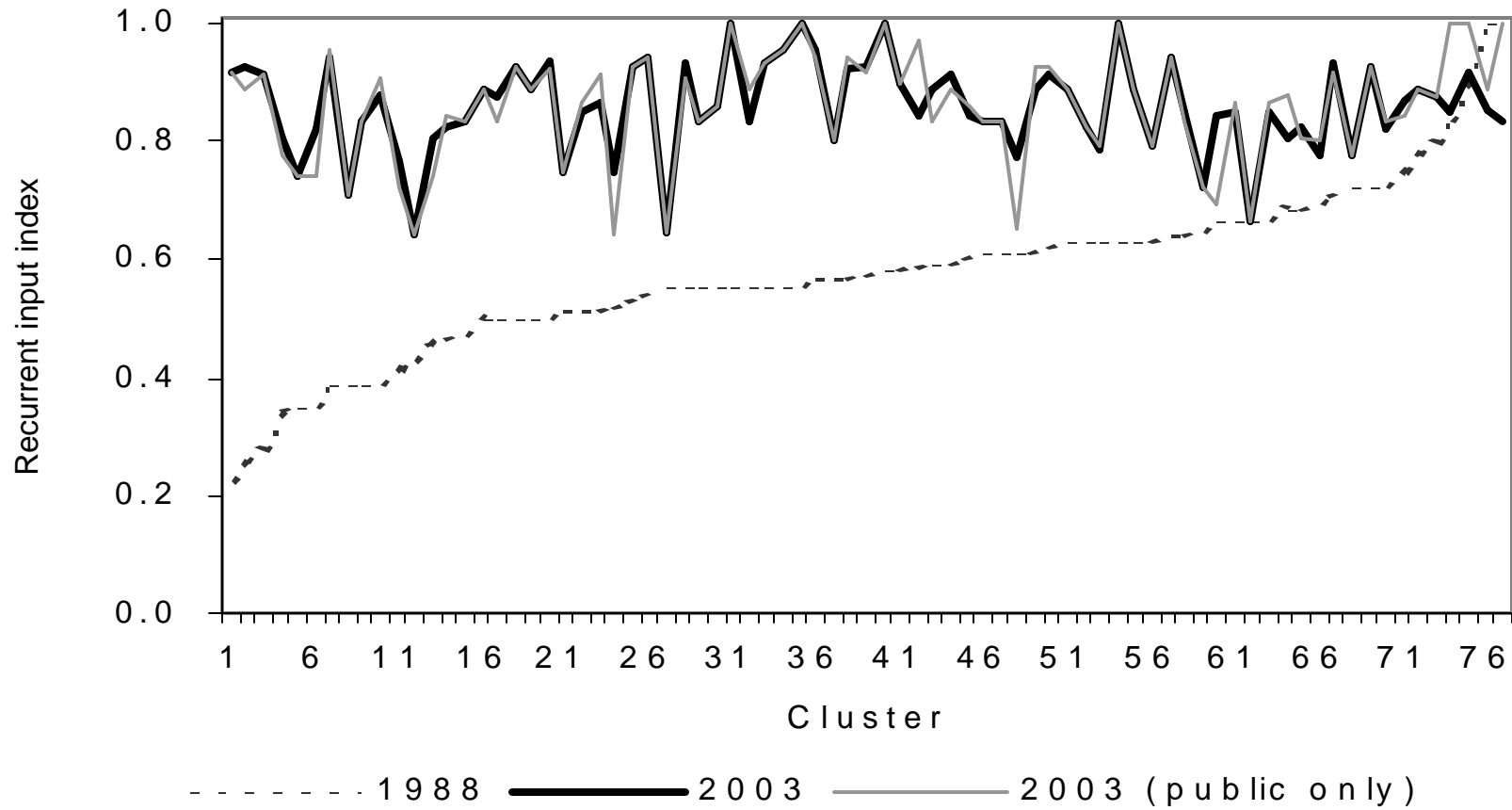


## Finding III: underlying these results are substantial improvements in school quality

- In 1988 less than half of schools could use all their classrooms when it was raining, but in 2003 over two-thirds can do so.
- 94 percent of schools have a blackboard in every classroom today compared to 78 percent 15 years ago.
- Fifteen years ago over two-thirds of primary schools reported occasional shortages of chalk, but today 86 percent say there is always enough.
- The percentage of primary schools having at least one English textbook per pupil has risen from 21 percent in 1988 to 72 percent today; and the percentage of JSS having at least one math book per pupil has risen from 13 to 71 percent.

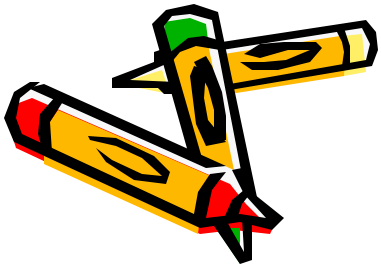
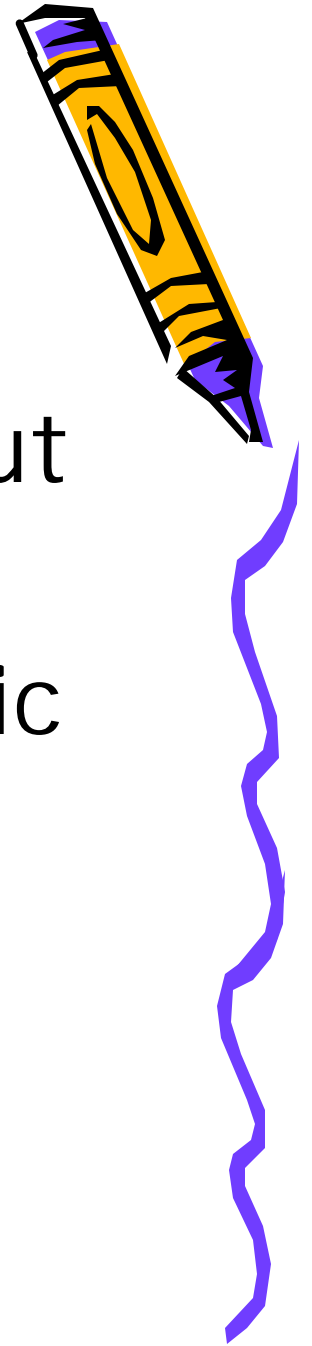


# Example: index of material inputs (primary)



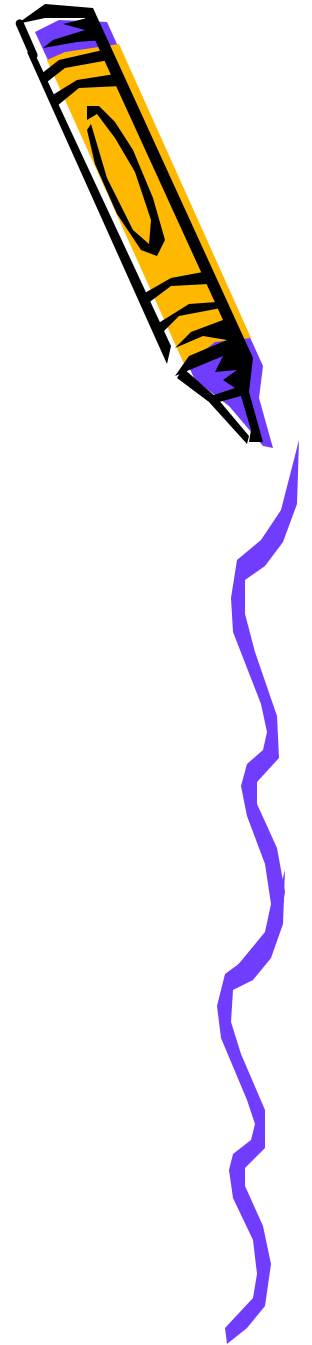
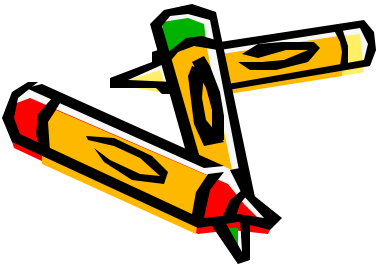
# Finding I V: but problems remain

- Learning outcomes improved but still poor
- Growing dichotomy within public sector
- Low teacher morale



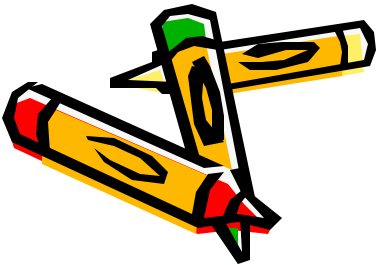
# The role of the World Bank

- In this time five projects at basic level:
  - HERP
  - EdSAC I and II
  - PSDP and BESIP
- Provided:
  - 8,000 classroom blocks (pavilions)
  - 35 million textbooks



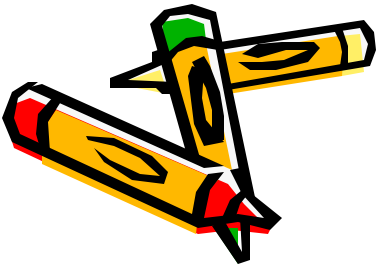
# Attribution

- Regression analysis of determinants of enrolments and test scores
- School building/rehabilitation increases enrolments by improving access and quality of infrastructure: about  $\frac{1}{4}$  of enrolment increase comes from this source
- Better infrastructure also good for learning outcomes, as are textbooks



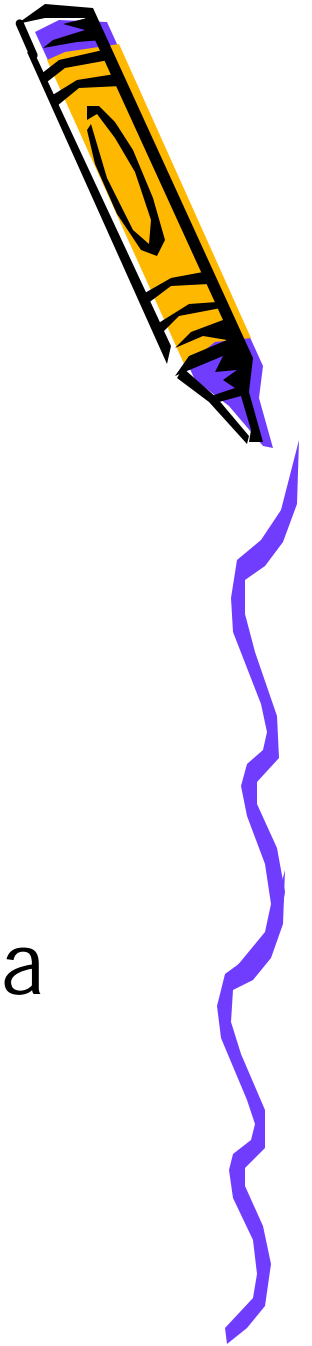
# The Bank and education reform

- Strong local ownership of reforms
- Bank support facilitated reforms through
  - Money for facilities, training and materials
  - Technical assistance and role of local WB staff
  - Mobilizing donor support
- Government commitment provided context in which projects worked



# Some other findings

- Determinants of teacher morale
- Determinants of absenteeism
- Aspects of school management
- Sources and uses of education data



# Conclusions

- Ghana is on track for education MDGs. Bank support has an identifiable role in this success
- Quantity has not been at the expense of quality – rather quality has led quantity
- The importance of books and buildings should not be forgotten
- Inequalities created by locally-based financing should be offset by the centre

