

# Feedback in Key Stage 3

What difference does this make to youngsters?

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*Universities in the UK - 29 November 2017*

# What do we do?

Does achieving a satisfactory level at Key Stage 3 affect....

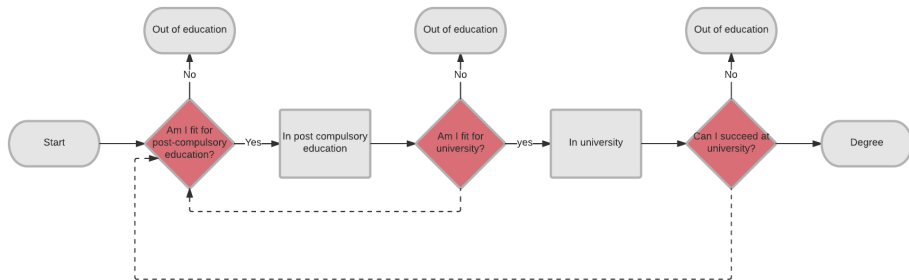
... Students' plans to stay on in full-time, post-compulsory education?

... Weekdays spent doing homework?

Does this effect change **by students' characteristics?**  
(gender, ethnicity, SES)

# Why Key Stage Three?

Every phase in education is a **stepping stone** for the next phase



# Why Key Stage Three (2)?

Key Stage 3 exams are low-stake exams:

- ▶ Signal students' ability to students, teachers and families
- ▶ Results are overlooked by university admission committees and employers



Quite clean signal of ability

# Why do we need feedback?

- ▶ To help people make the best choices for them
- ▶ To inform teaching (e.g., sets)
- ▶ To signal areas where more investment (study, tuition) is needed



Feedback can **reduce** inequality, by filling the information/resource gap between low and high SES students

## Students

Blogging students

# I wasn't ready for university - so I dropped out

Not all students are ready for university. A student blogger shares her experience of dropping out, and starting uni afresh



62 30

Helen Whitehouse

Thursday 6 February 2014 10.04 GMT



University is just too much for some students, writes a student blogger who dropped out. Photograph: Alamy

Advertisement

# Can feedback be dangerous?

- ▶ Feedback is noisy
- ▶ Feedback divides people into groups (e.g., those who pass and those who fail)
- ▶ Feedback reduces the concept of 'academic ability' to a restricted set of skills



Feedback can **increase** inequality by -imperfectly- labeling students with different types/levels of ability

"Every faculty member, dean, and college president can benefit from reflecting on the message of this book and pondering its implications for the way they go about their work."

—DEREK BOK, *President Emeritus, Harvard University*

# ARE YOU SMART ENOUGH?

HOW COLLEGES' OBSESSION WITH  
SMARTNESS SHORTCHANGES STUDENTS



**ALEXANDER W. ASTIN**  
AUTHOR OF *WHAT MATTERS IN COLLEGE*

**MiSoC** | ESRC  
Research Centre on  
Micro-Social Change





# What do we know already? (1)

A student receiving **positive** feedback is **more likely**...

- ▶ To enroll in an **academic Degree**
- ▶ To enroll in **University**
- ▶ To expect **good University grades**
- ▶ To study **STEMs** at University
- ▶ To **graduate** from University

# What do we know already? (2)

The effect is **stronger** if the student:

- ▶ **Misjudges** her ability
- ▶ Is from **low SES**

# Data

- ▶ **Longitudinal Study of Young People in England (LSYPE)**  
Survey of about 15,000 pupils living in England born between September 1989 and August 1990.
- ▶ **National Pupil Database (NPD)**  
Covers all students in state schools

Year	Month	Number interviewed	Median Age	Year at School	Key Stage
2004	January	-	14	9	
	February	-			
	March	30			
	April	3,717			
	May	3,856			
	June	3,493			
	July	2,182			
	August	832			
2005	September	434	15	10	4
	October	23			
	November	-			
	December	-			
	January	-			
	February	-			
	March	-			
	April	394			
	May	3,206			
	June	3,940			
	July	2,983			
	August	1,783			
September	355				
	October	-	11		
	November	-			
	December	-			

# KS3 Exams in 2004

- ▶ Were marked by **external examiners**
- ▶ Marks were assigned following **official guidance** by the 'Qualification and Curriculum Authority' (QCA)
- ▶ The performance was converted into **levels** on the basis of pre-set thresholds

# Capturing the effect of feedback

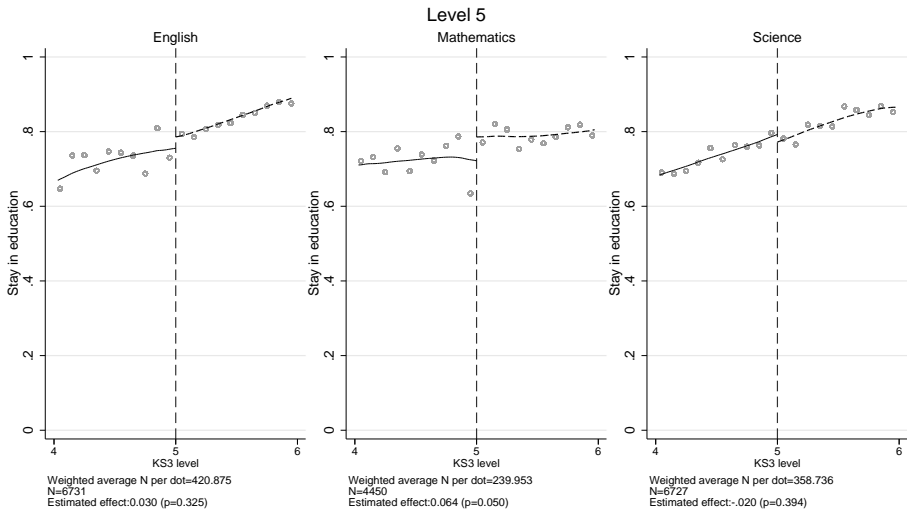
- ▶ Would you compare Laura&Claire..... ▶ Laura&Clare
- ▶ ...or Laura&Elena? ▶ Laura&Elena



We compare students who **just missed** the satisfactory level and students who **just achieved** it!

# Full-time post compulsory education

- ▶ Students marginally achieving a satisfactory level in **Mathematics** are around 6 percentage points **more likely** to want to stay on in full-time post-compulsory education than students marginally missing it
- ▶ No effects are found for achieving a satisfactory level in English or Science

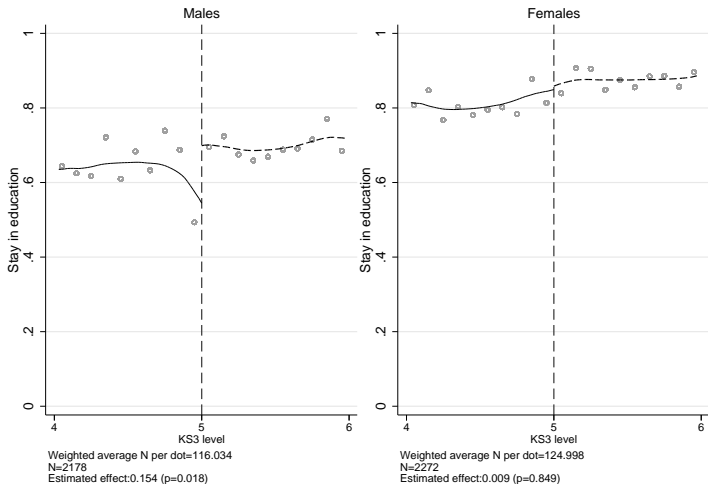




# Boys are driving the Maths effect!

- ▶ **Boys** marginally achieving a satisfactory level in **Mathematics** are around 15 percentage points **more likely** to want to stay on in full-time post-compulsory education than students marginally missing it
- ▶ Stronger effects are found for White British and high SES boys

## Mathematics, level 5



# Effort (Homework)

Effect on homework can be positive or negative  
(motivation vs slacker effect)

- ▶ Depends on whether people attribute their success to ability or effort
- ▶ Depends on whether people see ability and effort as complementary or substitute

# Results

- ▶ Effects only found for **girls** in the case of achieving a satisfactory level in **English**
- ▶ Low SES girls and girls from ethnic minorities **increase the time spent doing homework by half a day** when they marginally achieve the satisfactory level in **English**

# Conclusions

- ▶ **Boys** marginally achieving a satisfactory level in **Mathematics** are more likely to **want to stay on in full-time post compulsory education**



Do boys care more about Mathematics?

# Conclusions (2)

- ▶ Girls marginally achieving a satisfactory level in English are more likely to increase the time spent doing homework



Do girls care more about English?

Do girls attribute their success to hard work and boys to talent?

## Girls believe brilliance is a male trait, research into gender stereotypes shows

Study highlights how children as young as six can be influenced by stereotypes such as the idea that brilliance or giftedness is more common in men



Thanks!

For more questions: [\*lfumag@essex.ac.uk\*](mailto:lfumag@essex.ac.uk)



# English

8. This case study is organised into two sections of text: *The place* and *The problem*. They are written in **different styles**.

a) Explain one **difference** in the way they are written.

• \_\_\_\_\_

\_\_\_\_\_ (1 mark)

Q8a

b) Explain how the order of these two sections, *The place* and *The problem*, helps the reader to understand fully the problems caused by tourism in Purbeck.

• \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (1 mark)

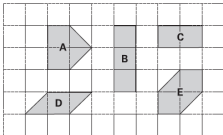
Q8b

▶ Back

# Mathematics

Grid shapes

6. The diagram shows some shapes on a 10 by 6 square grid.



- (a) Which two shapes have the same area as shape A?



.....

1 mark

- (b) Which two shapes have the same perimeter as shape A?



.....

1 mark

- (c) How many of shape C would you need to cover a 10 by 6 square grid?



.....

1 mark

K3304/Ma/Tier 4-5/P1

9



# Science

14. (a) The animals drawn below all have backbones.



- (i) What word describes animals with a backbone?

140  
1 mark

- (ii) There are five groups of animals with a backbone. Only four groups are shown above. Give the name of the missing group.

140  
1 mark

- (b) The drawing below shows the human backbone. It is made up of a number of small bones.



Why is it an advantage that the backbone is made of a number of small bones rather than one long bone?

140  
1 mark

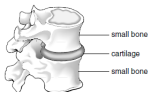
KS3/04/Sc/Tier 3-6/P2

29

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- (c) The drawing below shows two small bones from the backbone.



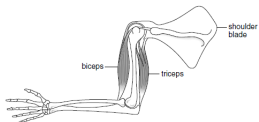
Between the small bones there is a material called cartilage. Cartilage is softer than bone. Give one advantage of having a softer material between the bones.

\_\_\_\_\_

\_\_\_\_\_

140  
1 mark

- (d) The diagram below shows the bones and two muscles of an arm.



The biceps and triceps are muscles which raise and lower the forearm. What happens to the biceps and triceps to raise the forearm?

the biceps \_\_\_\_\_

the triceps \_\_\_\_\_

140  
1 mark

maximum 5 marks

KS3/04/Sc/Tier 3-6/P2

29

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Total

140

140

# Laura & Clare

Laura

Not particularly gifted  
Loves hanging around in the outdoors  
Wants to become a lifeguard  
Does homework twice a week  
Comes from low SES family  
Had a bad exam day



Was not awarded a satisfactory level

Clare

Very gifted  
Loves reading  
Wants to become a scientist  
Does homework five days a week  
Comes from a high SES family  
Had a good exam day



Was awarded a satisfactory level

▶ Back



# Laura & Elena

Laura

Not particularly gifted

Loves hanging around in the outdoors

Wants to become a lifeguard

Does homework twice a week

Comes from a low SES family

Had a bad exam day



Was not awarded a satisfactory level

Elena

Not particularly gifted

Loves hanging around in the outdoors

Wants to become a lifeguard

Does homework twice a week

Comes from a low SES family

Had a good exam day



Was awarded a satisfactory level



▶ Back