The ‘changing’ nature of social inequality – how are young people’s attitudes to school stratified and how are they changing?

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Professor Brian Francis (University of Lancaster)

The changing nature of social inequality: Gender, ethnicity, class and age in the 21st Century, Social Stratification Research Conference, Clare College, University of Cambridge, 10-12 September 2008
Motivations
Substantive:

* Changing times consensus in youth research

* From the mid-1980s schools under pressure. Educational performance becomes more central in the public consciousness and discourse of ‘school effectiveness’ and ‘school quality’ emerges

* The *Education Reform Act 1988*, is sometimes regarded as the most important single piece of post-war education legislation. The result was that the early 1990s saw rapid changes in the curriculum, organisation, management and financing of schools (Spence 1993)

* What do young people think?

* Classical sociology of education (Willis’ Learning to Labour) disaffection with schooling
* Study of young people’s attitudes generally the domain of ‘qualitative’ approaches

* Are young people’s views stratified?
Practical:

* No obvious large scale data (especially nationally representative)

* The detailed study of ‘trends’ over time not normally possible. The comparative data window of the cohort studies is too wide (e.g. 1946, 1958, 1970, 2000/1?)

* The YCS is a stop gap for the missing 1980s and 1990 cohorts (see Gayle 2005)

* YCS has some (cross-sectional) repeated measures. Could it offer analytical possibilities?

* Methodological:

* Attitudinal measures are often treated simply in research on young people e.g. CRFR (see Jamieson 2005)

* Can latent variable methods help?

* Beware – new work in progress (death by graphs)
Youth Cohort Study of England and Wales (YCS) Data Structure

<table>
<thead>
<tr>
<th>Year Completed</th>
<th>Compulsory Schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>86</td>
</tr>
<tr>
<td>88</td>
<td>90</td>
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<tr>
<td>93</td>
<td>95</td>
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<tr>
<td>97</td>
<td>99</td>
</tr>
</tbody>
</table>

**YCS COHORT**

1 | 1 | 2 | 3 |
2* | 1 | 2 | 3 |
3 | 1 | 2 | 3 | 4 |
4 | 1 | 2 | 3 |
5 | 1 | 2 | 3 |
6* | 1 | 2 | 3/4(A) |
7 | 1 | 2 |
8 | 1 | 2 | 3(A) |
9 | 1 | 2 | 3/4(A) |
10 | 1/2(A) | 3 |

**Survey Year**

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<tr>
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<th>86</th>
<th>87</th>
<th>88</th>
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<th>98</th>
<th>99</th>
<th>00</th>
<th>01</th>
<th>02</th>
</tr>
</thead>
</table>

* YCS Cohort not included in the dataset SN5765

YCS Sweep 1 usually takes place in the spring of the year following sampling and subsequent sweeps normally in subsequent springs. Occasionally there are two sweeps of the same cohort in both spring and autumn of the same calendar year, these are shown e.g. 3/4(A) YCS Samples are drawn from school registers in the spring of year 11 (5th form)
## YCS Data Analyzed (Sample Sizes)

<table>
<thead>
<tr>
<th>Year Completed Compulsory Schooling</th>
<th>84</th>
<th>86</th>
<th>88</th>
<th>90</th>
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</tbody>
</table>

* YCS Cohort does not include the attitudinal measures analysed below
Outcome Variables

YCS Cohort 1 (1984) (Sweep1 Questionnaire)

YOU AND YOUR SCHOOL

1. Here are some things, both good and bad, which people have said about their 4th and 5th years at school. We would like to know what you think. Please tick a box for each one to say whether you agree or disagree.

- School has helped to give me confidence to make decisions
- School has been a waste of time
- School has done little to prepare me for life when I leave school
- School has taught me things which would be useful in a job

YCS Cohort 9 (1997) (Sweep1 Questionnaire)

1. Here are some things, both good and bad, which people have said about their 4th and 5th years at secondary school. We would like to know what you think. Please tick a box for each one to say whether you agree or disagree.

- School has helped to give me confidence to make decisions
- School has been a waste of time
- School has done little to prepare me for life when I leave school
- School has taught me things which would be useful in a job

YCS Cohort 8 (1995) These questions not asked

YCS Cohort 10 (1999)

1. Here are some things, both good and bad, which people have said about their last two years at secondary school (Years 10 and 11/i.e. 4th and 5th years). We would like to know what you think.

- School has helped to give me confidence to make decisions
- School has done little to prepare me for life when I leave school
- School has taught me things which would be useful in a job
- School work is generally worth doing

Agree Disagree
Attitudes to School
Proportions Agreeing (weighted)

Respondents ycs sweep 1.
* Overall an encouraging picture

* Caveat – changing levels of educational participation – we are asking ‘more’ 17 year olds who are still involved in education about their experience of school

![Proportion of Pupils in Education](chart.png)

Respondents ycs sweep 1.
* A general upward trend is observed

Respondents ycs sweep 1.
Gender

School has given me confidence
Proportions Agreeing by Gender

Respondents ycs sweep 1.
Logistic Regression Model (cohort * gender interaction)

School has given me confidence
Proportions Agreeing (with 95% QV comparison intervals)

Respondents ycs sweep 1.
School has done little to prepare me

Proportions Agreeing by Gender

Respondents ycs sweep 1.
School has taught useful things for job
Proportions Agreeing by Gender

Respondents ycs sweep 1.
School has been a waste of time
Proportions Agreeing by Gender

Respondents ycs sweep 1.
Ethnicity (three examples of question styles and categories)

YCS 1 (1984) (Sweep 2 Questionnaire)

5. Please tell us which one of the following ethnic groups you belong to, your answer will help us to know how the equal opportunities policies are working.

- White
- Black/African/Caribbean origin
- Indian origin
- Pakistani origin
- Bangladeshi origin
- White
- None of these
- Prefer not to say

YCS5 (1990) (Sweep 1 Questionnaire)

5. Please tell us which of the following groups you belong to. Your answer will help us to know how the equal opportunities policies are working.

- White
- Black/African/Caribbean origin
- Asian
- Indian
- Pakistani
- Bangladeshi
- Chinese
- Other Asian
- Any other ethnic group (please specify below)

YCS 10 (1999) (Sweep 1 Questionnaire)

5. Please tell us which of the following groups you belong to. Your answer will help us to know how the equal opportunities policies are working.

- White
- Black/African/Caribbean origin
- Asian
- Indian
- Pakistani
- Bangladeshi
- Chinese
- Other Asian
- Any other ethnic group (please specify below)
Ethnicity Harmonised

* White; Black; Indian; Pakistani; Bangladeshi; Other

*e.g. YCS 10 (1999) n=13,347; White =11,821; All other groups =1,526
Black = 331; Indian = 360; Pakistani = 343; Bangladeshi = 134; Other = 358

* Mixing of African and West Indian pupils; Others e.g. East African Asians

* No information on
  
country of birth
immigration (years in UK education system)
language spoken at home
religion

* Ethnicity question asked in Sweep 2 of YCS 1 (1984) after 25% attritions
(approx. 2,000 cases) - YCS 1 omitted from these analyses
Generally no clear relationship with ethnicity (except black pupils here)

School has done little to prepare me
Proportions Agreeing by Ethnic Group

Respondents ycs sweep 1.
Parental Social Class

YCS 1 (1984) (Sweep 1 Questionnaire)
3. Which of the following apply to your parents (or step-parents)?

- In a full-time job
- In a part-time job
- Unemployed
- Retired
- Doing full-time housework
- Something else (please describe: re-code if possible)
- Not sure

Please tick one box for your father and one for your mother.

YCS 7 (1993) (Sweep 1 Questionnaire)
2. Are your parents (or step-parents) employed full-time at the moment?

Please tick one box for your father, and one for your mother.

3. Please tell us about your parents' (or step-parents') jobs. If they are not working at the moment, please tell us about their most recent jobs.

a. What is the name of the job?

b. What kind of work do they do?

c. What sort of place or organisation do they work for (e.g. shop, factory, office, hospital, school, etc.)?

d. Are they self-employed?
## Parental Social Class

### YCS 9 (1997) (Sweep 1 Questionnaire)

<table>
<thead>
<tr>
<th>FATHER (STEPFATHER)</th>
<th>MOTHER (STEPMOTHER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Is your father employed full-time at the moment?</td>
<td>a) Is your mother employed full-time at the moment?</td>
</tr>
<tr>
<td>a57fa Yes [ ] No [ ]</td>
<td>a57ma Yes [ ] No [ ]</td>
</tr>
<tr>
<td>His current job</td>
<td>Her current job</td>
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<tr>
<td>a57fb</td>
<td></td>
</tr>
<tr>
<td>b) What is his current job (or if he is not employed full-time at the moment, what was his most recent job)?</td>
<td>b) What is her current job (or if she is not employed full-time at the moment, what was her most recent job)?</td>
</tr>
<tr>
<td>a57fc</td>
<td></td>
</tr>
<tr>
<td>c) What kind of work does/did he do there?</td>
<td>c) What kind of work does/did she do there?</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>d) What sort of firm or organisation does/did he work at?</td>
<td>d) What sort of firm or organisation does/did she work at?</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Is/was he self-employed?</td>
<td>e) Is/was she self-employed?</td>
</tr>
<tr>
<td>Yes [ ] No [ ] a57fe</td>
<td>Yes [ ] No [ ] a57me</td>
</tr>
</tbody>
</table>

### YCS 10 (1999) (Sweep 1 Questionnaire)

- Q.57a Are your parents (or stepparents) employed full-time at the moment?
- Q.57b What are your parents (or stepparents) current jobs (or if they are not employed full-time at the moment, what were their most recent jobs)?
- Q.57c What kind of work do/did your parents (or stepparents) do there?
- Q.57d What sort of firm or organisation do/did your parents (or stepparents) work at?
- Q.57e Are/were your parents (or stepparents) self-employed?
- Q.57f Do or did your parents (or stepparents) supervise or manage a group of people?
Parental Social Class

* Some early cohorts do not include detailed occupational codes

* Generally there is self-employment information but not detailed employment status information (e.g. Employers; Managers; Supervisors etc.)

* Varying measures deposited with the data

Some cohorts include a SEG measure (e.g. standard 16 categories in YCS 7 1993) there is no clear information on how these are derived

Cohort 9 (1997) variable labelled as SEG but in practice RGSC with Class I and Class II merged
Parental Social Class 1990s Cohorts

* The 1990s YCS Cohorts offer more analytical potential – better data collection but documentation is still poor (compared with many other surveys)

* Croxford *et al.* (SN 5765) deposited an 8 and a 3 category NS-SEC measure for father, mother and family

* In addition we computed alternatives e.g. RGSC, CASMIN, CAMSIS alternative NS-SEC (using [www.geode.stir.ac.uk](http://www.geode.stir.ac.uk))
Data Quality

* In the present analysis we use a ‘dominance’ approach

* Remember… young people aged 17 being asked about their parents

* Registrar General S.C. between 12% and 14% missing data in 1990s cohorts

* Promising results from a paper at RC33 last week Nobel et al. reported an experiment with LSYPE cohort testing pupils with YCS question and interviewing their parents

Over 60% of young people correctly reported their parents’ occupation at 4 digit OUG (disappointingly only approx. 74% get it at 1 digit level)
No significant social class pattern to the errors (using NS-SEC)!
Family Social Class

School has given me confidence
Proportions Agreeing by Family (RG) Social Class

Respondents ycs sweep 1.
School has given me confidence

Proportions Agreeing by Family (NS-SEC) Social Class

Respondents ycs sweep 1.
School has given me confidence

Family (male) Camsis Score

Source: YCS, Cohorts 1990-1999; Unweighted data
School has done little to prepare me
Proportions Agreeing by Family (RG) Social Class

Respondents ycs sweep 1.
School has taught me useful things for job

Proportions Agreeing by Family (RG) Social Class

Respondents ycs sweep 1.
Exploring a Latent Variable Approach

* Are these 4 attitudinal variables indicators of a latent response (attitude towards school or experience of school)?

* In essence there are 16 (2 x 2 x 2 x 2) response patterns for pupils in cohorts 1984 – 1993

* Can we model these response patterns with a latent class model?
* Associations between the 4 outcome variables

* Associations are relatively stable across the cohorts
I’ve noticed lately that everyone shows a latent variable graphic?
* Latent Class Model – estimated in Latent Gold software

* Simple Exploratory model (including cohorts and gender as explanatory variables)

* 4 clusters identified empirically through goodness of fit measures
Cluster 1: Pro-school (positive) school experience

Cluster 4: Anti-school (negative) school experience
Gave me confidence
Agree

Waste of time
Disagree

Done little to prepare me
Disagree

Taught me useful things
Agree

Cluster 2
- Generally pro-school – lower confidence, but school did do something to get them ready for later life

Cluster 3
- Generally pro-school – but school did not get them ready for later life
* Some Preliminary Results

YCS
Cohort

<table>
<thead>
<tr>
<th>Year</th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
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</thead>
<tbody>
<tr>
<td>Cohort 1</td>
<td>1984</td>
<td>0.35</td>
<td>0.31</td>
<td>0.25</td>
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<tr>
<td>Cohort 3</td>
<td>1986</td>
<td>0.39</td>
<td>0.29</td>
<td>0.21</td>
</tr>
<tr>
<td>Cohort 4</td>
<td>1988</td>
<td>0.51</td>
<td>0.23</td>
<td>0.17</td>
</tr>
<tr>
<td>Cohort 5</td>
<td>1990</td>
<td>0.55</td>
<td>0.21</td>
<td>0.17</td>
</tr>
<tr>
<td>Cohort 7</td>
<td>1993</td>
<td>0.59</td>
<td>0.16</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Prob Means (across clusters)
Preliminary Conclusions

* A potentially encouraging picture – overall the school experience seems to be becoming more positive

* Descriptive Results suggest that

  - Gender – some small differences; girls more positive experience
  - Ethnicity – no clear patterns except for black pupils e.g. preparation
  - Social Class – observed effect with RGSC and NS-SEC
  - Other effects (not shown today) Year 11 school type & Parental Housing

* Latent class approach is promising
  - Detecting a small, but persistent, group (cluster 4) who are disaffected
  - What is the difference between cluster 2 and cluster 3 pupils?

* What next?
  - Expand the latent class model (incorporate more variables)
EXTRA MATERIAL

Respondents ycs sweep 1.
School has done little to prepare me

Proportions Agreeing by Housing Tenure (family)

YCS Cohort

Respondents ycs sweep 1.
School has taught useful things for job
Proportions Agreeing by Housing Tenure (family)

Respondents ycs sweep 1.
School has given me confidence

Proportions Agreeing by School Type (year 11)

Respondents ycs sweep 1.
School has done little to prepare me
Proportions Agreeing by School Type (year 11)

Respondents ycs sweep 1.
School has taught me useful things for job

Proportions Agreeing by School Type (year 11)

Respondents ycs sweep 1.