

*Attendance, Broken Weeks and
Performance*

Primary Schools in South Gloucestershire

*Analysis of Key Stage 2 Data
2005/6 Cohort*

June 2007

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Introduction

This report has been produced by the Information and Research Services Section of the Department for Children and Young People, South Gloucestershire Council. It has been prepared for the purpose of identifying what the relationship is between attendance and performance in South Gloucestershire funded Primary and Junior schools. It will also attempt to identify what the extent of this relationship is and what characterises pupils who display poor attendance.

It focuses on the analysis of South Gloucestershire's Key Stage 2 results for the 2005/6 Year 6 cohort. Special Schools have been excluded from the analysis.

It follows on from a similar piece of research published in January 2006 that focused on the relationship between attendance and performance of South Gloucestershire Secondary School pupils. The findings concluded that poor attendance is highly correlated with performance below expectations.

This research follows the same methodology as the Secondary School research and attempts to take into account prior attainment and other factors when examining the possible association between attendance and performance at Key Stage 2.

Joe Prince
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June 2007

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1.0 Key Findings

- The overall absence rate for South Gloucestershire maintained Primary schools for 2005/6 is 5.58%. This is lower than the corresponding rate for England.
- Those pupils with high rates of absence are characterised by significantly higher than expected levels of eligibility for free school meals and pupils classified as having special educational needs. This is particularly true for those pupils who display the highest levels of frequent absences.
- Analysis of different aggregated attainment levels indicate a strong relationship between attainment and attendance, i.e. lower rates of absence are related to higher levels of attainment. This relationship is strongest for those pupils who attain level 5 in Maths and Science. However, analysing pupil level data actually shows a very poor correlation (or strength of linear association) between attendance and attainment at Key Stage 2. In fact, the variability in attendance explains only around 4% of the variability in 'raw' attainment, thus suggesting attendance on its own has little influence on attainment.
- When prior attainment is taken into account there is no identifiable relationship between attendance and the level of progress pupils make between Key Stage 1 and Key Stage 2 in Reading and Writing, i.e. increasing levels of attendance is having little or no effect on progress in English. However, there is evidence of a relatively weak association between attendance and the level of progress pupils make between Key Stage 1 and Key Stage 2 in Maths, i.e. increasing levels of attendance is having a marginal positive effect on progress in Maths.
- Taking into account prior attainment, pupil and school characteristics have the advantage of factoring out pupils' differing levels of attainment and progress at the same time. Even when this has been done there is not a strong and clear association between higher levels of attendance and higher levels of achievement at Key Stage 2. It would appear that once a critical level of attendance has been reached there is no significant benefit to be gained from improving attendance further, this is particularly true for English.
- Those pupils who underachieved by more than one sub-level below their FFT estimate displayed, on average, significantly higher levels of absence than those pupils who either met their FFT estimate or exceeded their FFT estimate by more than one sub-level. Even though a general causal link could not be proven there were a significantly high proportion of SEN pupils that underachieved who also displayed significantly higher than average rates of absence. It is probable that SEN pupils would benefit most from a strategy to improve attendance. Strategies to improve behaviour and motivation may also be necessary at the same time.
- There is no evidence to suggest that borderline pupils have a greater chance of attaining the required Key Stage 2 sub-level just by improving their attendance.
- The eight to ten percent of pupils who display the highest levels of frequent absences (characterised by high rates of SEN and FSM pupils) over a long period are marginally more at risk of underachieving at Key Stage 2 than pupils who display relatively high rates of absences, albeit fewer in frequency.

2.0 Evidence to Date

*"Regular school attendance is very important for all pupils because they face a number of risks if they fail to attend. In particular, pupils who do not attend regularly are much more likely to leave school with few or no qualifications, and more likely to be out of work after leaving school. They are also more easily drawn into crime and anti-social behaviour and some can be vulnerable to harm by adults."*¹

- 2.1 The latest overall absence rate for English maintained primary schools is 5.76%, representing the percentage of half days missed due to absence. This is made up of authorised absences at 5.30% and unauthorised absences at 0.46%.²
- 2.2 The overall absence rate for South Gloucestershire maintained primary schools is lower, at 5.58%. The corresponding figures for authorised and unauthorised absences are 5.35% and 0.23% respectively.³
- 2.3 Even though the latest overall absence rates for English maintained primary schools have shown a rise on the previous year, the figures are lower than the average for the period 1996/7 to 2005/6.⁴
- 2.4 The latest overall absence rate for South Gloucestershire primary schools is at a five year high.⁵
- 2.5 Both authorised and unauthorised school year on year absence rates for secondary schools is higher than for primary schools.
- 2.6 Reasons for school absence are multi-dimensional, i.e. caused by factors at home (for example, family holidays); factors at school (for example, management of behaviour); and pupil level factors (for example, bullying). The most common cause for absence of primary school age children is illness.⁶
- 2.7 Analysis of Key Stage 2 school level results for England shows that academic attainment is strongly related to absence levels - higher levels of attainment were associated with greatly reduced levels of absence.⁷ However, it would appear that studies have so far failed to show a causal link between attendance and attainment.

¹ National Audit Office (2005), *Improving School Attendance in England*, NAO, London

² Department for Education and Skills (2006), *Pupil Absence in Schools in England 2005/6 (Provisional)*, SFR 35/2006.

³ Ibid.

⁴ Ibid.

⁵ Information and Research Services, Information Management, Department for Children & Young People, South Gloucestershire Council.

⁶ National Audit Office (2005), *op. cit.*

⁷ Schagen, I., Benton, T., Rutt, S., *Study of Attendance in England*, National Foundation For Educational Research, December 2004.

3.0 Relationship, Association or Causation?

3.0.1 It is important to distinguish between the terms relationship, association and causation as these will be adopted throughout this report.

- ❖ Relationship: a relationship can be linear or curvilinear. Either way, changes in one variable are accompanied by changes in another variable. A relationship can also be monotonic (positive or negative) or non-monotonic.⁸ The strength of any relationship will be indicated by how consistent the changes between the variables are, i.e. the steepness of the line or curve. For example, Figure 1 shows a strong positive (linear) relationship, Figure 2 shows a weak positive relationship and Figure 3 shows an example where there is no relationship.

Figure 1: Example of a Strong Relationship

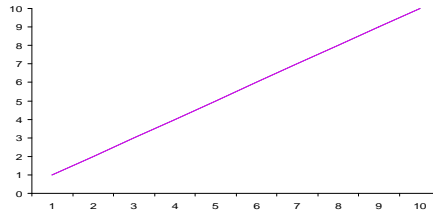


Figure 2: Example of a Weak Relationship

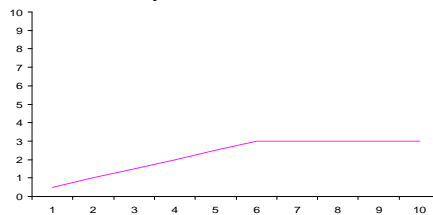
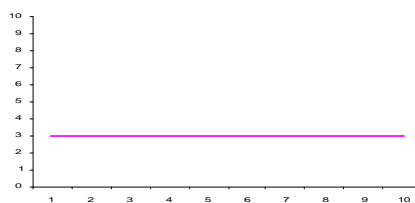


Figure 3: Example where there is No Relationship



- ❖ Association: same as relationship.
- ❖ Causation: denotes the relationship or association between one event (cause) and another event (effect) which is the consequence (result) of the first. Merely establishing a strong relationship or association **does not** imply causation. In addition, causation requires temporal precedence (i.e. cause before effect) and elimination of plausible alternative explanations (i.e. confounding variables).
- ❖ Correlational⁹ Relationship/Association: refers to the situation where there is a non-causal relationship or association.

⁸ Any relationship between attendance and performance is unlikely to be non-monotonic.

⁹ Correlation is a statistical measure for the degree of linear association.

4.0 Data Considerations and Methodology

4.1 Cohort

4.1.1 The cohort selected for analysis were Year 6 (age 11) who took their Key Stage 2 SATS tests in South Gloucestershire maintained primary and junior schools during the academic year 2005/6 (3,318 pupils).

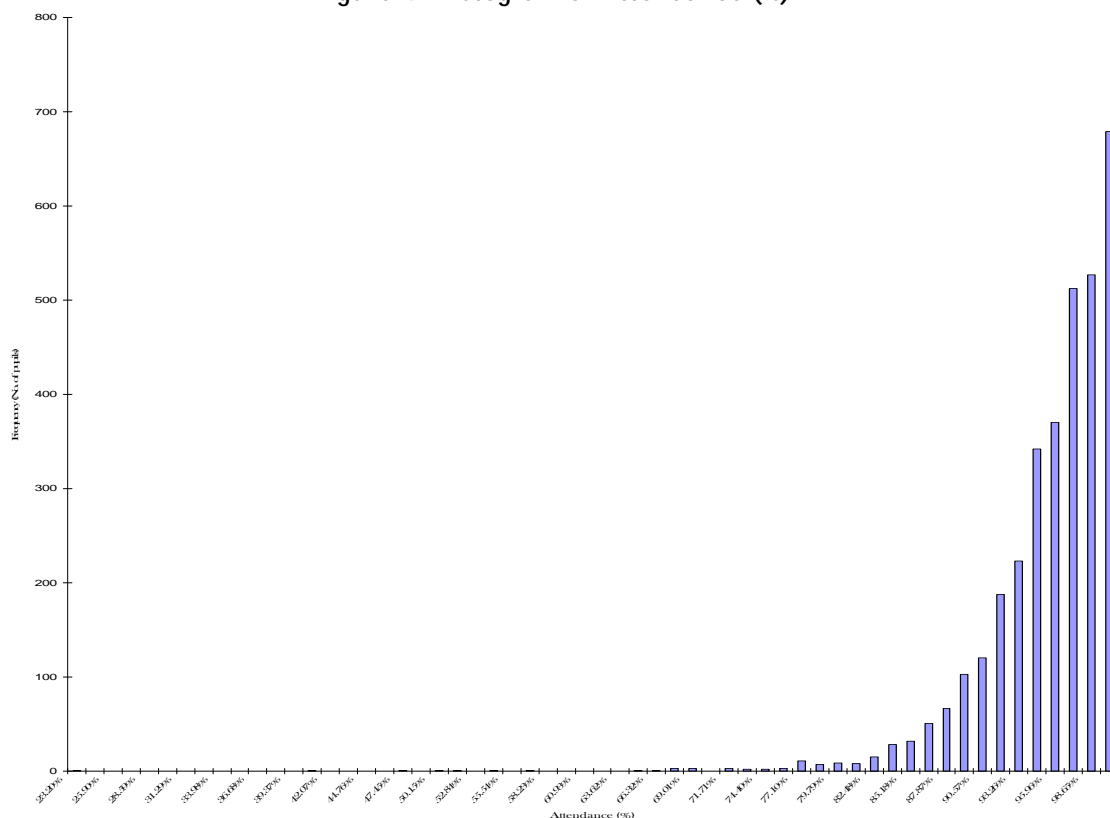
4.2 Attendance Data

4.2.1 Only the chosen cohort's attendance data for the first five terms (i.e. the terms before their Key Stage 2 SATS tests) of the same academic year were used in the analysis. This was then adopted as a proxy figure to represent their attendance over a longer period.

4.2.2 All but two pupils with Key Stage 2 results¹⁰ had an attendance record and were included even if they joined the school part way through the academic year, i.e. the number of available sessions were taken into account in the calculation of attendance.

4.2.3 In all there were 312 possible half-day sessions during the first five terms of the academic year 2005/6. The attendance for each pupil ranged from 23.2% to 100%, with an average of 94.8% and standard deviation of 5.13%. The histogram (Figure 4) shows the distribution of attendance by pupil, i.e. a heavily skewed distribution.

Figure 4: Histogram of Attendance (%)



¹⁰ Two pupils were excluded from the analysis as one did not have an attendance record and the other had a zero attendance record.

4.2.4 Attendance data includes both authorised and unauthorised absences.

4.2.5 For the purposes of the analysis pupils were split into five groups based on their attendance (Table 1). These groups are different to the Attendance Groups used in the analysis of secondary school attendance data due to the wider spread in this data for secondary school pupils.¹¹

Table 1: Attendance Groups

Group	Attendance Range			Number of Pupils	Percentage
Att A	97.0%	to	100.0%	1316	39.7%
Att B	94.0%	to	96.9%	965	29.1%
Att C	91.0%	to	93.9%	503	15.2%
Att D	88.0%	to	90.9%	268	8.1%
Att E	Less than 88%			264	8.0%
South Gloucestershire				3316	100.0%

4.2.6 Pupils were also split into groups according to the percentage of broken weeks¹² they had in their first five terms of the 2005/6 academic year (Table 2).

Table 2: Broken Weeks Groups

Group	Broken Weeks Range			Approximate number of Broken Weeks	Number of Pupils	Percentage
Bro A	0.00%	to	7.49%	0 to 2	991	29.9%
Bro B	7.50%	to	14.99%	3 to 5	998	30.1%
Bro C	15.00%	to	22.49%	6 to 7	755	22.8%
Bro D	22.50%	to	29.99%	8 to 10	299	9.0%
Bro E	30.00%	to	100.00%	11+	273	8.2%
South Gloucestershire					3316	100.0%

4.2.7 For many employers the cost and disruption of recurrent, short spells of absence are greater than for occasional, longer periods of absence which can often be planned for.¹³ It will be interesting to see if recurrent, short-term spells of absence have a greater effect on pupil's performance than occasional, longer periods of absence. This may be likely as pupils with long periods of absence are more likely to be targeted for additional help and assistance.

¹¹ Morrison, T., *An Analysis of Attendance, Broken Weeks and Performance against Expectations for two cohorts of pupils at secondary schools in South Gloucestershire*, South Gloucestershire Council, January 2006.

¹² A broken week is defined as a week where a pupil has missed at least one session during the week (morning or afternoon).

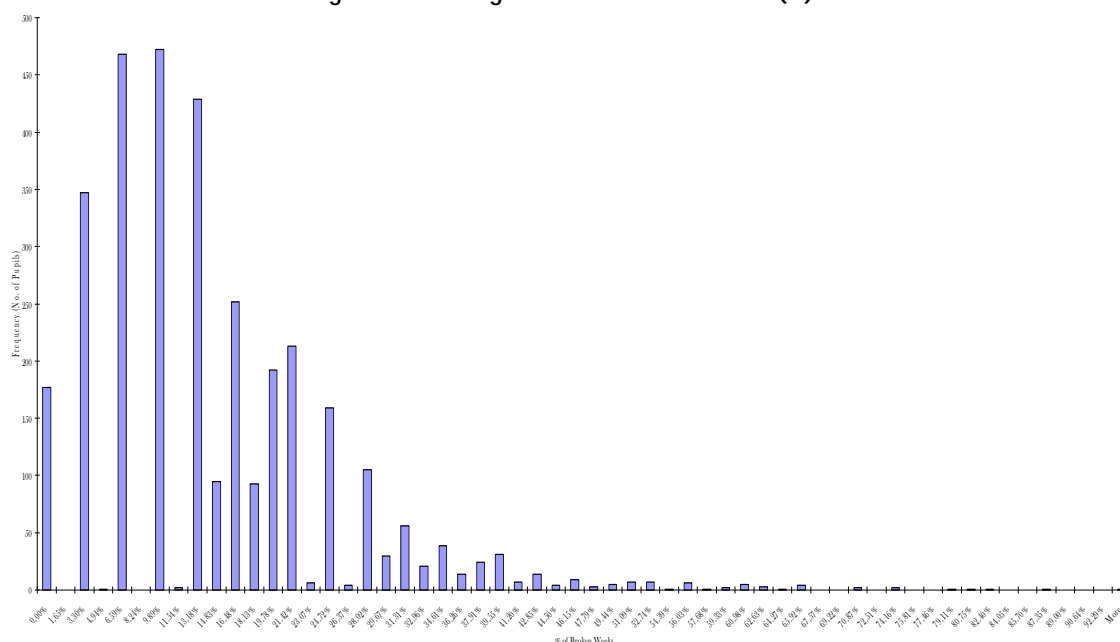
¹³ <http://www.acas.org.uk/index.aspx?articleid=1206>

4.2.8 There were 34 weeks in the first five terms of the 2005/6 academic year and pupils had a range of possible weeks from 1 to 34. However, 97% of pupils had 33 or 34 possible weeks.

4.2.9 The percentage of broken weeks for each pupil ranged from 0% to 93.94%, with an average of 14.10% and standard deviation of 10.91%.

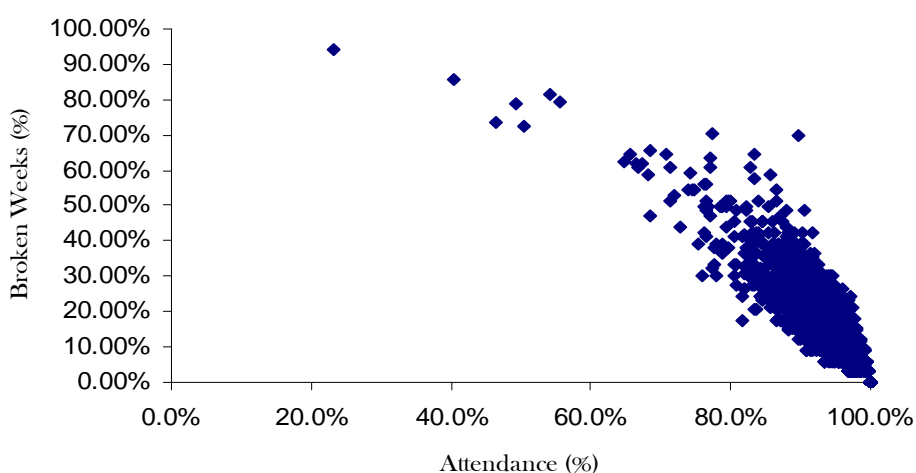
4.2.10 The wider spread of the percentage of broken weeks (Figure 5) meant that the groups chosen were wider than those for the attendance.

Figure 5: Histogram of Broken Weeks (%)



4.2.11 There is an obvious association between a pupil's percentage attendance and their percentage of broken weeks, i.e. as the percentage attendance increases the percentage of broken weeks decreases (Figure 6). The correlation coefficient is -0.88^{14} , a very strong negative correlation.

Figure 6: Attendance vs. Broken Weeks



¹⁴A statistical measure of the strength of linear association between two variables: Pearson R Correlation Coefficient: +1 perfect linear positive relationship, 0 no relationship and -1 perfect linear negative relationship.

4.2.12 Table 3 clearly shows that it is impossible to have very high attendance and a very high number of broken weeks. Likewise, it is impossible to have low attendance and a low number of broken weeks.

Table 3: Attendance Groups against Broken Weeks Groups

South Gloucestershire		Attendance Group					
		Att A	Att B	Att C	Att D	Att E	Total
Broken Weeks Group	Bro A	862	123	6			991
	Bro B	415	465	106	12		998
	Bro C	38	336	260	99	22	755
	Bro D	1	37	110	83	68	299
	Bro E		4	21	74	174	273
	Total	1316	965	503	268	264	3316

4.2.13 It is possible for a pupil to have quite high attendance whilst still having a large number of broken weeks. This is due to the case where a pupil has a high frequency of short spells of absence, i.e. half a day every month.

4.2.14 A quarter of all pupils were in the top Attendance Group and the top Broken Weeks Group.

4.3 Key Stage 2 SATS Data (Attainment¹⁵)

4.3.1 For each pupil their Key Stage 2 English, Maths and Science results were used in the analysis - sub-level and associated National Curriculum points score.

4.3.2 The percentage who achieved level 4 and above; and percentage who achieved level 5 in English, Maths and Science was calculated for each of the Attendance Groups and Broken Weeks Groups.

4.3.3 Furthermore, the mean percentage absence and mean percentage number of broken weeks was calculated for each Key Stage 2 subject sub-level.

4.3.4 The correlation coefficients between the percentage attendance and English, Maths and Science National Curriculum Sub-Points were calculated. The same was calculated for the percentage of broken weeks.

4.4 Matched Key Stage 1 SATS Data (Progression¹⁶)

4.4.1 Where matched Key Stage 1 results were available (97.6% of the KS2 cohort)¹⁷ each pupil's progress in Reading, Writing and Maths was

¹⁵ Refers to 'raw' attainment and should be distinguished from the terms achievement (Section 4.5) and progression (Section 4.4).

¹⁶ Refers to a pupil's actual attainment when compared to their Key Stage 1 results.

¹⁷ 81 pupils did not have Key Stage 1 results and were excluded from the analysis at this stage.

calculated by subtracting their Key Stage 1 National Curriculum points score from their Key Stage 2 National Curriculum points score.

- 4.4.2 The average progress in Reading, Writing and Maths was calculated for each of the Attendance Groups and Broken Weeks Groups.
- 4.4.3 Furthermore, each pupil's progression score was classified into one of five categories (Table 4) and this was used to calculate the mean percentage absence rate and mean percentage of broken weeks for each of the five classifications in Reading, Writing and Maths.

Table 4: Classification of Key Stage 1 to Key Stage 2 Curriculum Points Progress

Range of Points Progress			Category of Progress	Pupil Numbers		
				Reading	Writing	Maths
-6	to	-2	Negative	0	0	2
0	to	8	Poor	382	527	794
10	to	14	Satisfactory ¹⁸	2172	2204	2146
16	to	20	Good	633	472	256
22	to	30	Excellent	21	9	0
Unable to Calculate Progress due to Absence or pupil being Disapplied at Key Stage 1				27	23	37

4.4.4 None of the matched Key Stage 2 cohort displayed negative progress in Reading or Writing. In Maths no pupil displayed progress classified as 'excellent' and only two pupils displayed negative progress. Due to the small number of pupils in the 'negative' Progress Category in Maths this category was excluded from the analysis.

4.5 Fischer Family Trust Data (Achievement¹⁹)

4.5.1 Finally, each pupil's Fischer Family Trust (FFT) Key Stage 2 Type B²⁰ estimated sub-level for English, Maths and Science was compared to their corresponding actual Key Stage 2 English, Maths and Science result.²¹

4.5.2 Each pupil's FFT estimated National Curriculum points score for English, Maths and Science was subtracted from their actual English, Maths and Science National Curriculum points score.

4.5.3 This 'difference' was then classified as shown in Table 5 and gives a measure of whether a pupil overachieved ('above'), achieved ('in

¹⁸ The expected Curriculum Points Progress between Key Stage 1 and Key Stage 2 is 12 points, i.e. each point representing one term's progress.

¹⁹ Refers to a pupil's actual attainment when compared to their FFT estimate.

²⁰ The FFT Type B estimates are based on the progress of similar pupils in similar schools. In this case similar pupils mean those of the same gender, with the same month of birth and, most importantly, with the same prior attainment at Key Stage 1. Similar schools are those with a broadly similar socio-economic make up (based on pupil postcodes and the percentage of pupils who are eligible for free school meals), similar attainment and variance of intake.

²¹ 150 pupils did not have a KS2 FFT estimate and were excluded from the analysis at this stage.

line') or underachieved ('below') when compared to their FFT estimate.

Table 5: Subject Difference Classification

Classification	National Curriculum Points Difference (Actual Points - FFT Estimate Points)	Description
Above	Greater than +2 Points	Achieved more than 1 sub-level above estimate
In Line	-2, 0 or 2 Points	Achieved same sub-level or only 1 sub-level different
Below	Less than -2 Points	Achieved more than 1 sub-level below estimate

4.5.4 Table 6 shows the percentage of pupils in each classification by Key Stage 2 subject. In all three subjects the majority achieved their FFT estimate. Maths had the highest proportion of pupils who overachieved, at 17%. Maths and Science had the highest proportion of pupils who underachieved, at 13% for both.

Table 6: Percentage of Pupils in each Classification by Key Stage 2 Subject

Subject Difference Classification	KS2 Subject		
	English	Maths	Science
Above	15%	17%	14%
In Line	77%	70%	73%
Below	8%	13%	13%

4.6 ACORN Data

4.6.1 Developed by CACI over 25 years ago, ACORN was the first geodemographic classification in the UK. It classifies households²² into one of five categories:

- a. Wealthy Achievers;
- b. Urban Prosperity;
- c. Comfortably Off;
- d. Moderate Means; and
- e. Hard-Pressed.

4.6.2 Over 400 variables were used to build ACORN and describe the different ACORN types. Of these variables, 30% were sourced from the 2001 Census. The remainder were sourced from CACI's own consumer lifestyle databases.

4.6.3 The ACORN data is only used for the examining the characteristics of the various Attendance Groups and Broken Weeks Groups.

²² At postcode level

4.7 Methodology

- 4.7.1 The characteristics of the Attendance Groups and Broken Weeks Groups will be examined in order to identify which groups of pupils have particularly high incidences of absence.
- 4.7.2 The following three models will be developed to analyse whether attendance and performance at Key Stage 2 are associated and to establish the nature of the association:
 - A. Attainment Model: models Key Stage 2 attainment data against attendance data;
 - B. Progression Model: models Key Stage 1 to Key Stage 2 progression data against attendance data; and
 - C. Achievement Model: models FFT achievement data against attendance.

4.8 Problems with the Data

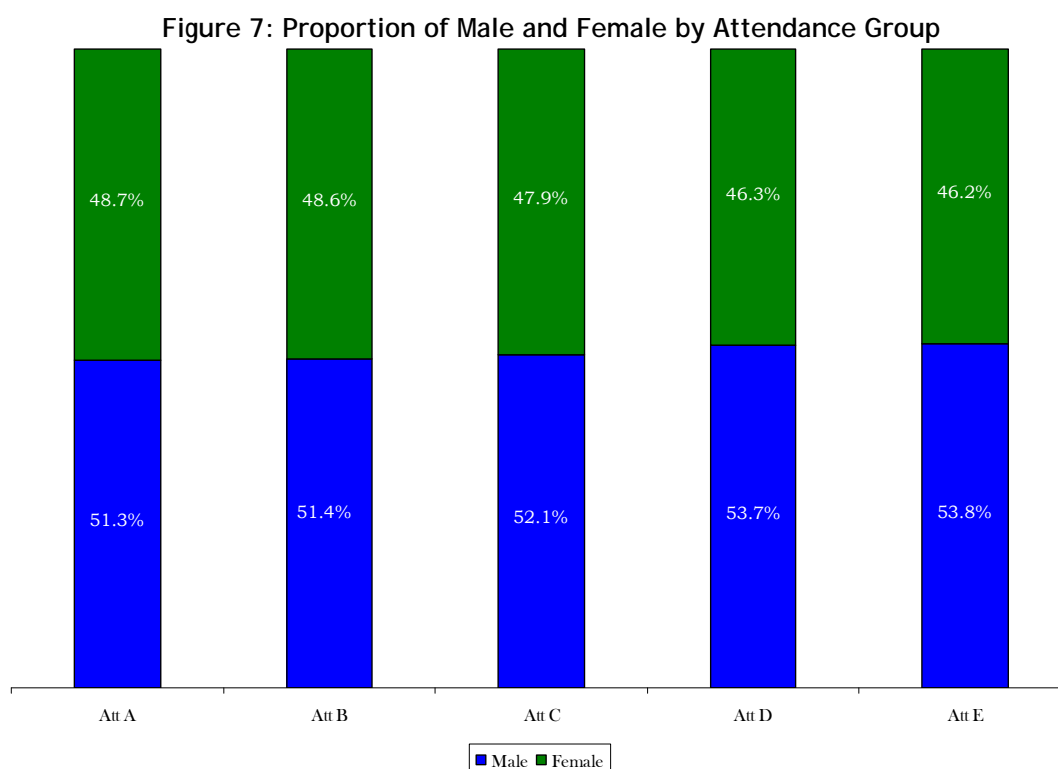
- 4.8.1 There may be variability in the accuracy of the attendance data between schools.
- 4.8.2 Great care has been taken to create groupings with sufficient numbers of pupils in order to overcome any problems with potentially unrepresentative groupings. Furthermore, these groupings have been discussed and agreed with Educational Welfare and follow the same accepted methodology adopted in previous research into secondary school attendance.²³ The analysis has also been reinforced by looking at mean attendance of various groupings, for example, mean percentage absence of each progression category by subject.
- 4.8.3 The problem of using FFT estimates rather than actual Performance Targets set by the teacher is likely to cause some inaccuracies in the results from the Achievement Model. This is due to the fact that only the teacher will be able to factor in personal circumstances such as family breakdown and whether the pupil has developed intellectually faster than expected.
- 4.8.4 Due to the unrepresentative sample of pupils in South Gloucestershire schools the results should not be applied to a wider geographical area.

²³ Morrison, T. op. cit.

5.0 Characteristics of the Attendance Groups

5.0.1 This section will investigate whether there is an association between levels of absence and various contextual characteristics - gender, free school meals, ACORN classification, special education need and ethnicity.

5.1 Gender



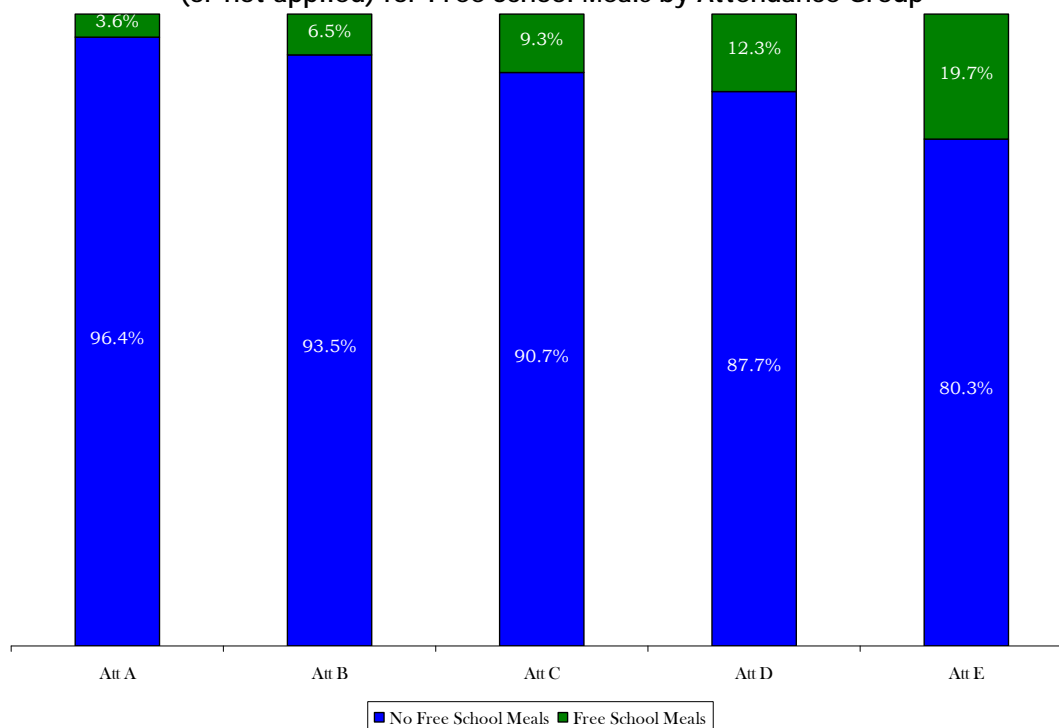
5.1.1 From Figure 7 there would appear to be no difference in the proportion of males and females between the Attendance Groups.

5.1.2 This would suggest there is not a particular problem with boys' attendance, a somewhat surprising result considering the 'gender gap' that exists in English in favour of girls.²⁴ This could be the first indication that this underachievement in English displayed by boys is not linked (or even related) to poorer levels of attendance.

²⁴ Prince, J., *The 'Gender Gap' – The Statistics*, Presentation given at Bradley Stoke School on 5th March 2007.

5.2 Free School Meals

Figure 8: Proportion of those pupils eligible for Free School Meals and those not eligible (or not applied) for Free School Meals by Attendance Group



5.2.1 Figure 8 shows a relatively strong positive relationship between those pupils eligible for free school meals and attendance, i.e. increasing levels of absence are strongly associated with increasing levels of eligibility for free school meals.

5.2.2 Proportionately, there are over five times as many pupils eligible for free school meals in the bottom Attendance Group than in the top Attendance Group.

5.2.3 This confirms the same findings for school pupils across England.²⁵

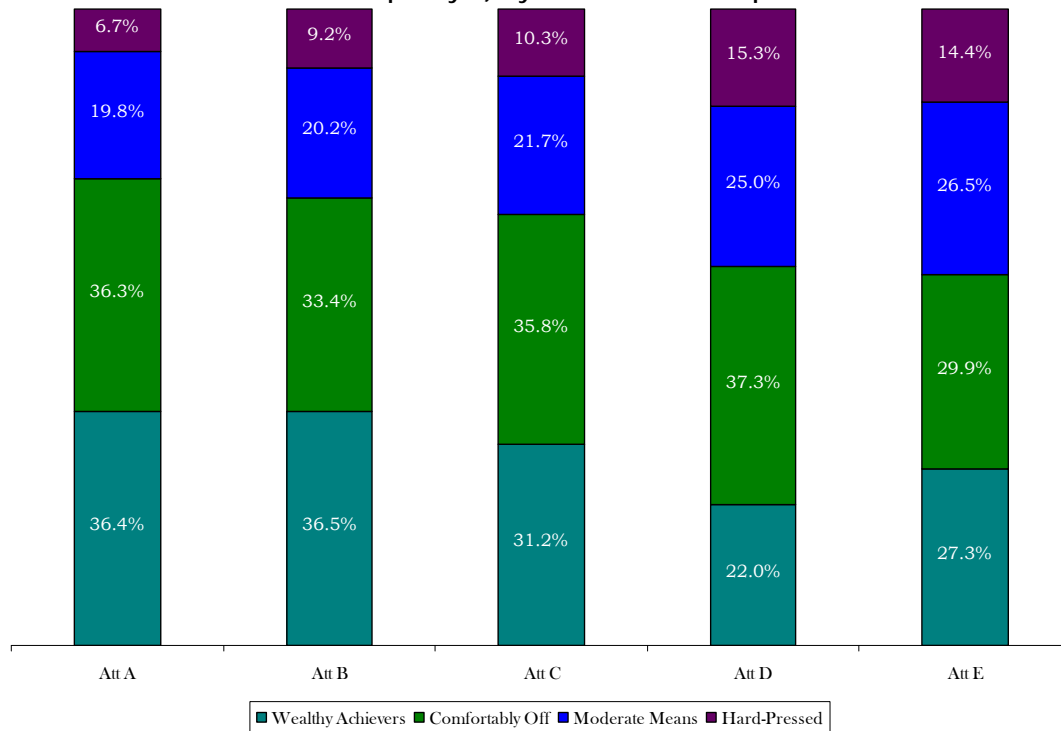
5.2.4 This would suggest that relative poverty and absence are related. Again this is confirmed by the same national research which concluded that the "*...the higher the levels of FSM in a school compared to the rest of the LEA the higher the levels of absence will be.*"²⁶

²⁵ Schagen, I., et. al., op. cit.

²⁶ Ibid.

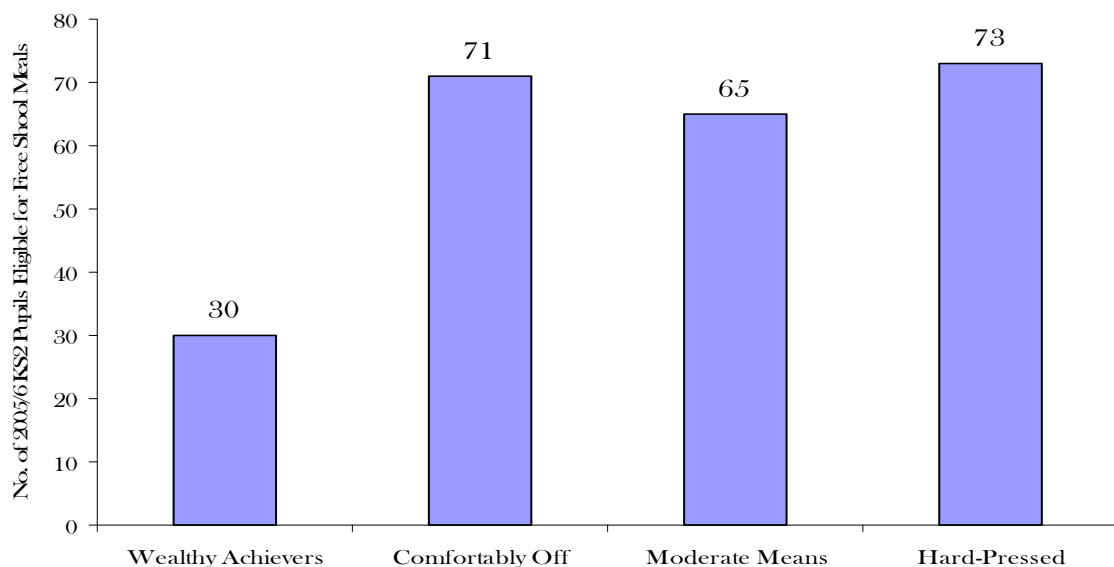
5.3 ACORN Groups

Figure 9: Proportion of pupils in each of the ACORN Classifications (excluding Urban Prosperity²⁷) by Attendance Group



5.3.1 Even though Figure 9 shows a weaker relationship to that found in 5.2, it still indicates a relatively strong relationship between socio-economic groupings²⁸ and levels of absence. For example, 7% of the top Attendance Group was classified as coming from 'Hard-Pressed' families, whereas between 14% and 15% of the bottom two Attendance Groups were similarly classified.

Figure 10: Graph showing the numbers of pupils eligible for Free School Meals in each ACORN Group



²⁷ Due to the very small numbers of pupils in this classification

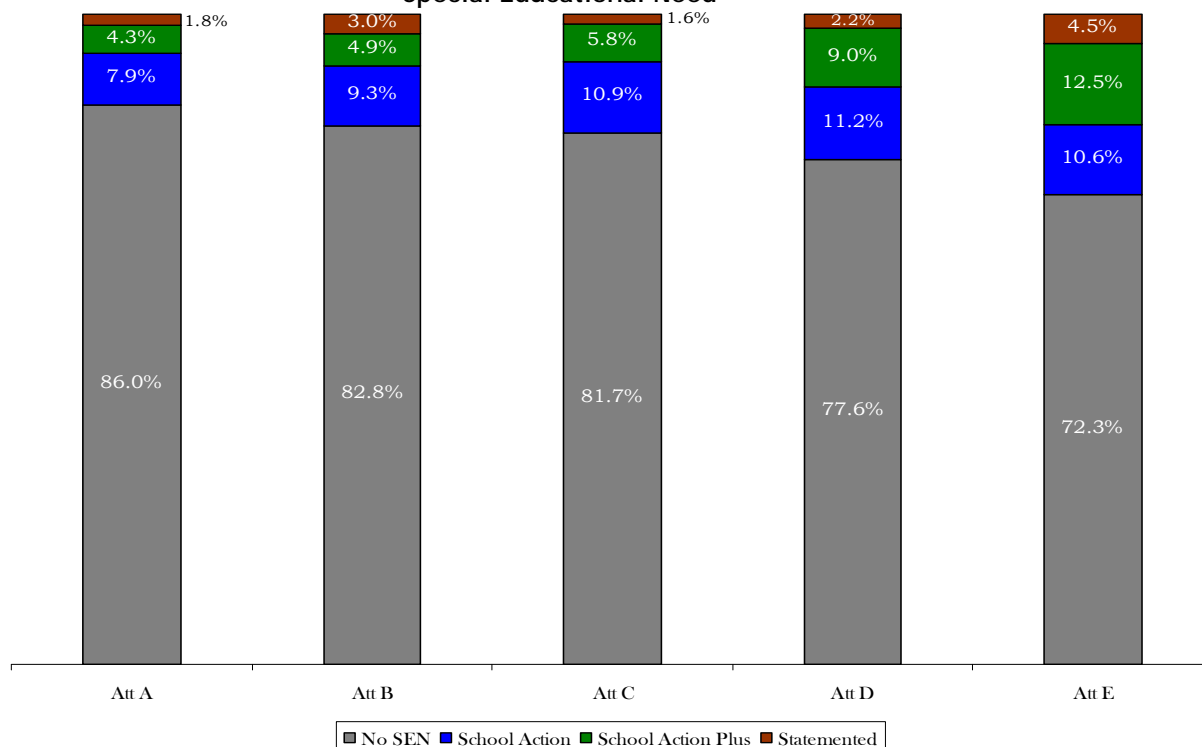
²⁸ Using ACORN groups as a proxy

5.3.2 Figure 10 shows a possible reason behind this less clear relationship between deprivation and attendance, i.e. the fairly even spread of pupils eligible for free school meals in the bottom three ACORN groups (Comfortably Off, Moderate Means and Hard-Pressed) and a larger than expected number in the top ACORN group (Wealthy Achievers). This would seem to suggest that families in relative poverty live in all areas of the community, not just areas of relative deprivation. However, recent research has suggested that using free school meal status as a proxy of low income is imperfect.²⁹

²⁹ Hobbs, G., Vignoles, A., *Is Free School Meal Status a Valid Proxy for Socio-Economic Status (in Schools Research)?*, Centre for the Economics of Education, London School of Economics, May 2007

5.4 Special Educational Needs

Figure 11: Proportion of pupils in each Attendance Group who are classified as having a Special Educational Need



- 5.4.1 Figure 11 shows a relatively strong positive relationship between those pupils classified as having a special educational need and attendance, i.e. increasing levels of absence are associated with an increasing proportion of pupils with special education needs.
- 5.4.2 Proportionately, there are twice as many pupils classified as having special education needs in the bottom Attendance Group than in the top Attendance Group. This may not be surprising in view of the fact that the largest percentage of pupils with Special Education Needs are classified as having Behavioural, Emotional and Social Difficulties.
- 5.4.3 Of the three SEN groups, it is the pupils who have been classified as 'School Action Plus' that have the greatest differences between the Attendance Groups, particularly between the top three (A, B and C) and the bottom two (D and E).

5.5 Ethnicity

- 5.5.1 Due to the small numbers of pupils in each of the ethnic groups it is not possible to reliably establish if a relationship exists between a higher incidence of absence and a particular ethnic group by examining Attendance Groups.
- 5.5.2 The only ethnic group that displayed a substantially lower than average attendance overall was the 'Traveller of Irish Heritage' group.³⁰

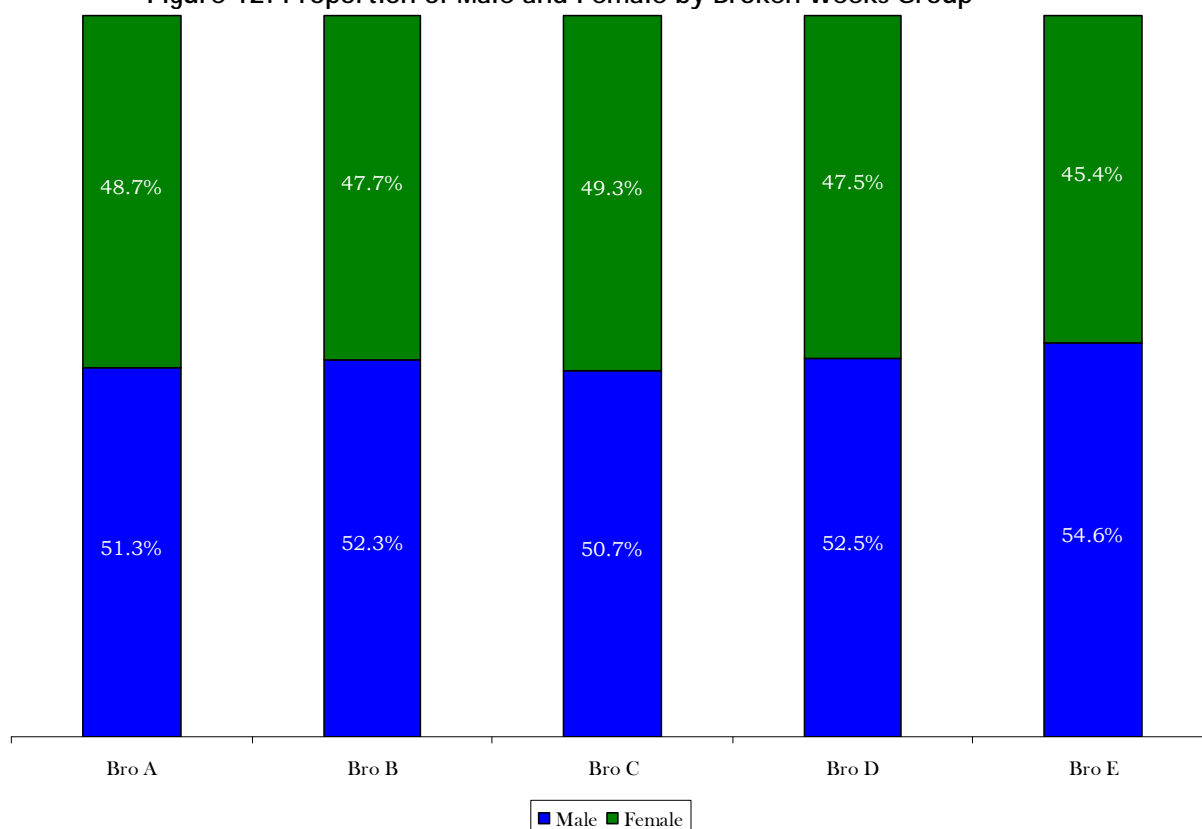
³⁰ Two pupils, both of whom were in the bottom Attendance Group

6.0 Characteristics of the Broken Weeks Groups

6.0.1 Similar to the previous section, this section will investigate whether there is an association between levels of absence and various contextual characteristics - gender, free school meals, ACORN classification, special education need and ethnicity. However, unlike the previous section, using Broken Weeks Groups will allow examination into the characteristics of those pupils who display frequent absences from school.

6.1 Gender

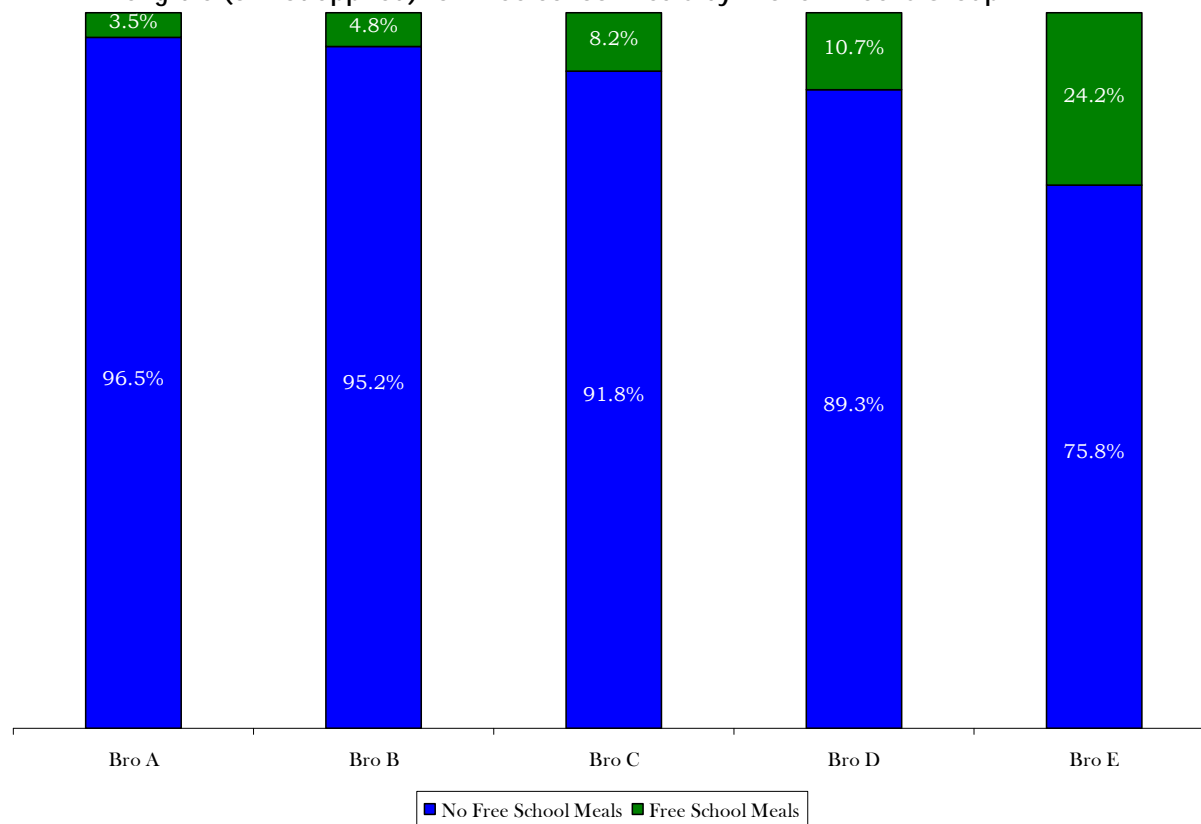
Figure 12: Proportion of Male and Female by Broken Weeks Group



6.1.1 Figure 12 shows, as with the Attendance Groups, there is little difference in the proportion of males and females between the Broken Weeks Groups.

6.2 Free School Meals

Figure 13: Proportion of those pupils eligible for Free School Meals and those not eligible (or not applied) for Free School Meals by Broken Weeks Group

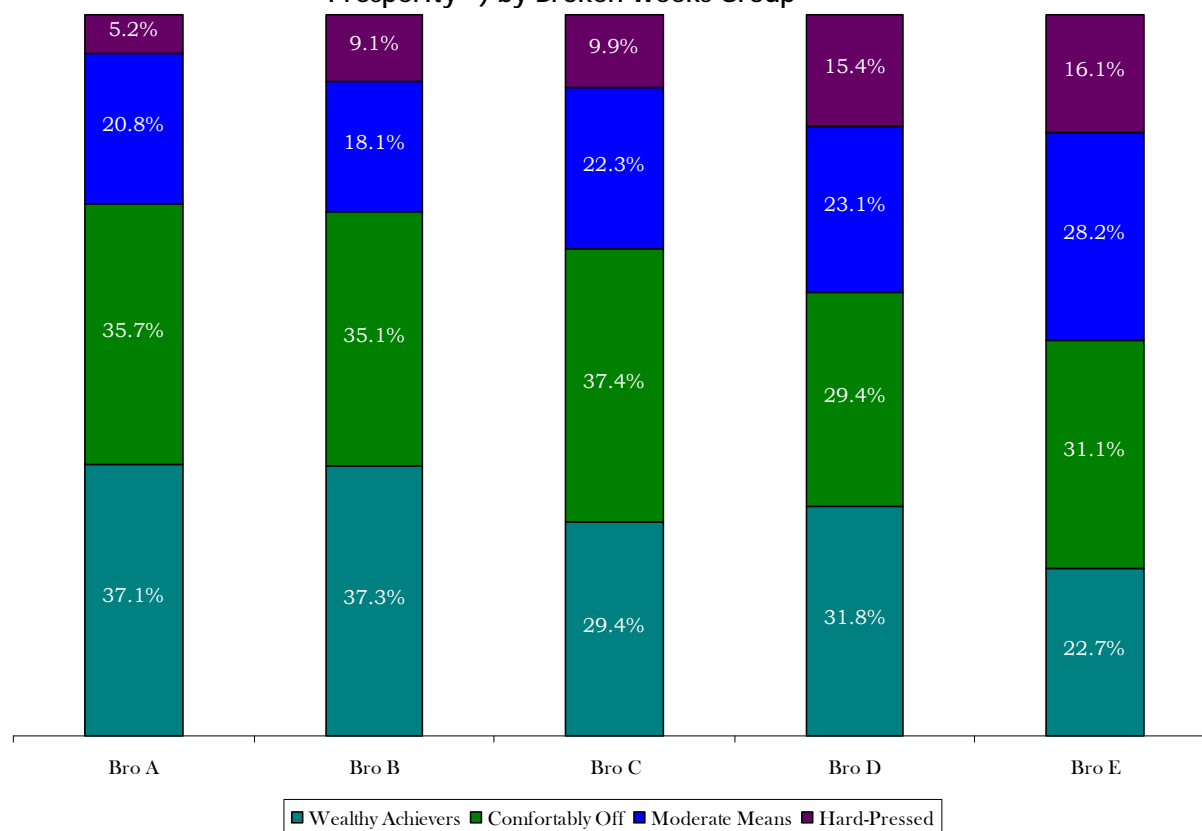


6.2.1 As with the Attendance Groups, Figure 13 shows that there is a relatively strong positive relationship between those pupils eligible for free school meals and attendance, i.e. increasing levels of absence is strongly associated with increasing levels of eligibility for free school meals.

6.2.2 Proportionately, there are seven times as many pupils eligible for free school meals in the bottom Broken Weeks Group than in the top Broken Weeks Group. This is an even greater difference to that seen in the Attendance Groups (Section 5.2.2). This would suggest that pupils eligible for free school meals are not only displaying relatively high rates of absence, but they are more likely to go absent from school on a frequent basis.

6.3 ACORN Groups

Figure 14: Proportion of pupils in each of the ACORN Classifications (excluding Urban Prosperity³¹) by Broken Weeks Group



6.3.1 Even though Figure 14 shows a less clear relationship to that found in 6.2, it still indicates a relatively strong relationship between socio-economic groupings³² and levels of absence. For example, 5% of the top Broken Weeks Group was classified as coming from 'Hard-Pressed' families, whereas between 15% and 16% of the bottom two Broken Weeks Groups were similarly classified.

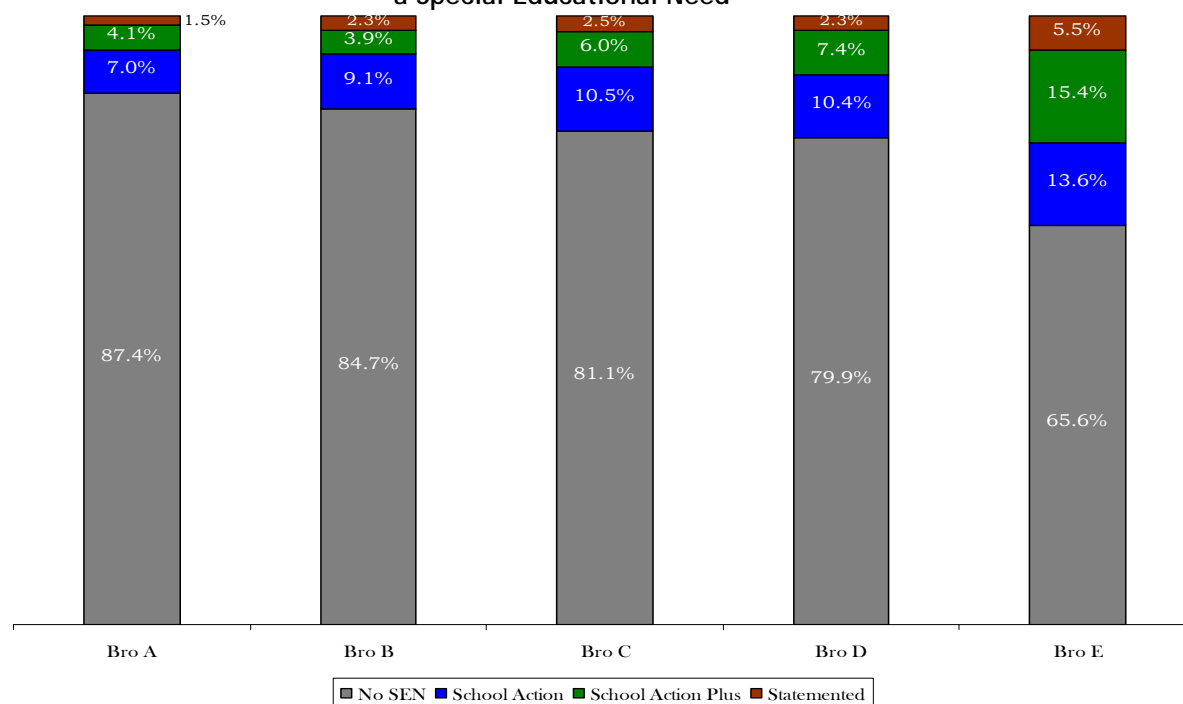
6.3.2 These differences are slightly greater than those differences found between the Attendance Groups.

³¹ Due to the very small numbers of pupils in this classification

³² Using ACORN groups as a proxy

6.4 Special Educational Needs

Figure 15: Proportion of pupils in each Broken Weeks Group who are classified as having a Special Educational Need



6.4.1 As with the Attendance Groups, Figure 15 shows a relatively strong positive relationship between those pupils classified as having a special educational need and attendance, i.e. increasing levels of absence are associated with an increasing proportion of pupils with special education needs.

6.4.2 Proportionately, there are two and a half times as many pupils classified as having a special education need in the bottom Broken Weeks Group than in the top Broken Weeks Group.

6.4.3 These differences are slightly greater than those differences found between the Attendance Groups, particularly in the bottom Broken Weeks Group. This would suggest that pupils classified as having a special educational need are not only displaying relatively high rates of absence, but they are more likely to go absent from school on a frequent basis.

6.5 Ethnicity

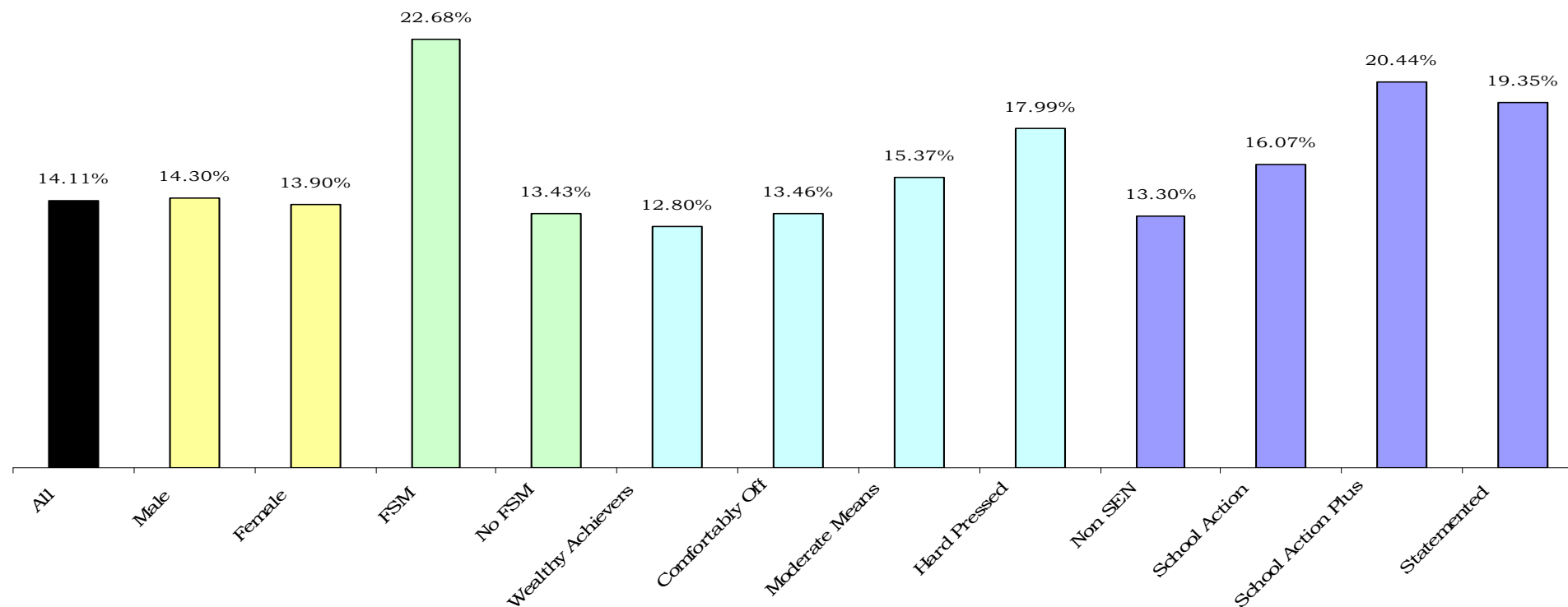
6.5.1 Due to the small numbers of pupils in each of the ethnic groups it is not possible to reliably establish if a relationship exists between a higher incidence of absence and a particular ethnic group by examining Broken Weeks Groups.

6.5.2 The only ethnic group that displayed a substantially lower than average percentage of Broken Weeks was the 'Traveller of Irish Heritage' group.³³

³³ Two pupils, both of whom were in the bottom Broken Weeks Group

6.6 Average Percentage of Broken Weeks

Figure 16: Mean Percentage Broken Weeks by Pupil Groups



6.6.1 Figure 16 reinforces the above findings, i.e. pupils eligible for free school meals or classified as School Action Plus display a higher percentage incidence of absence, on average, than other groups of pupils.

6.6.2 When examining the differences within the various groups (gender, free school meals, ACORN and SEN) the largest and most significant difference is between those pupils eligible for free school meals and those pupils not eligible for free school meals.³⁴ There is no significant difference between male and female mean percentage of broken weeks.³⁵

³⁴ P-Value of less than 0.0001: the difference in means is considered to be extremely statistically significant.

³⁵ P-Value of 0.28: the difference in means is considered not to be statistically significant.

7.0 Attainment Model

7.0.1 This section will investigate if there is a relationship between attendance and attainment of the chosen Key Stage 2 cohort in English, Maths and Science. It will also attempt to investigate the strength and extent of this relationship.

7.1 Attendance Groups

7.1.1 The charts in Appendices 1 and 2 shows that there is a positive relationship between attainment and attendance for the chosen Attendance Groups, i.e. attainment reduces as attendance reduces in English, Maths and Science for the chosen levels of attainment.

7.1.2 The strongest relationship is seen for those pupils who achieved level 5 in Maths and Science. For example, 40.2% of pupils in the top Attendance Group achieved level 5 in Maths, whereas only 17.4% of the bottom Attendance Group achieved this same level. This is not surprising in view of the fact that, unlike English, Maths and Science are more hierarchical and knowledge based subjects, i.e. the highest level of attainment is more likely to be achieved by those pupils who are motivated and attend more regularly.

7.1.3 As seen in 4.0, those pupils who have poor attendance tend to be characterised by higher proportions of pupils with Special Educational Needs or pupils eligible for free school meals. As would be expected, the attainment of pupils with Special Educational Needs is on average less than for pupils without Special Education Needs. Furthermore, the attainment of pupils who are eligible for free school meals is on average lower than those pupils who are not eligible for free school meals.³⁶ These two factors go some way to explaining the relationship between poor attendance and lower attainment in Key Stage 2 SATS results.

7.2 Broken Weeks Groups

7.2.1 The charts in Appendices 3 and 4 show that there is a positive relationship between attainment and percentage of broken weeks for the chosen Broken Weeks Groups, i.e. attainment reduces as attendance reduces in English, Maths and Science for the chosen levels of attainment.

7.2.2 As with the Attendance Groups, the strongest relationship is seen for those pupils who achieved level 5 in Maths and Science. For example, 40.6% of pupils in the top Broken Weeks Group achieved level 5 in Maths, whereas only 16.8% of the bottom Broken Weeks Group achieved this same level. However, unlike with the Attendance Groups, there is also a strong relationship between attendance and performance at level 5 in English. This would suggest that those pupils who display higher levels of frequent absences over a long

³⁶ HM Government White Paper, *Higher Standards, Better Schools for All*, October 2005

period are less likely to achieve higher levels of attainment at Key Stage 2.

7.2.3 Unlike with the Attendance Groups, it is also clear from the charts in Appendix 4 that the performance of the bottom Broken Weeks Group is significantly below that of the other Broken Weeks Groups in all three subjects. This would suggest particular problems with this group of 273 pupils who have missed 11 or more weeks during their first five terms of the 2005/6 academic year immediately preceding their KS2 SATS tests. These pupils would appear to be more at risk of underperforming than pupils who still display relatively high rates of absences, but fewer in frequency.

7.3 General Relationship?

7.3.1 So far we have established that a relationship exists between attainment and the chosen Attendance Groups and Broken Weeks Groups. However, this may not indicate a relationship between attendance and attainment in general.

7.3.2 In order to progress we need to be as confident as we can be that this is a truly representative relationship and did not just occur as a result of how the chosen Attendance Groups and Broken Weeks Groups were formed.

7.3.3 The charts in Appendices 5 and 6 show the mean percentage absence and the mean percentage of broken weeks respectively for each sub-level achieved in English, Maths and Science. They confirm the relationship found earlier between attendance and attainment, i.e. lower rates of absence are strongly related to higher levels of attainment.

7.4 Relationship or Causation?

7.4.1 Great care should be taken when interpreting the charts in Appendices 1-6 as they **do not imply causation**; they merely indicate a relationship between attendance and attainment. Furthermore, any relationship is likely to be circular, i.e. highly motivated and potentially high achieving pupils are more likely to attend school and attain higher results in SATS test.³⁷

7.4.2 It is possible that the relationship so far seen between attendance and attainment is potentially misleading and could lead to wrongly assuming cause and effect. This could be an example of a confounding error, i.e. the independent variable, attendance, has been confounded by other variables. These 'other variables' are likely to include the following: motivation, behaviour, parent's level of educational attainment, family and social background. All of these factors are likely to be related to both attendance and attainment and they are probably more likely to provide a better explanation for the variability in/between attendance and attainment. This may also be evidenced by the fact that those with higher levels of absence are

³⁷ National Audit Office (2005), *Improving School Attendance in England*, NAO, London

those pupils eligible for free school meals or classified as having a special education need.

- 7.4.3 When pupil level data is analysed Table 7 would indicate that the association between attendance and attainment is in fact very weak, i.e. as the correlation between attendance and attainment is very low (or non-existent in the case of percentage attendance and English sub-points). In fact, only around 4%³⁸ of the variability in attainment can be explained by the variability in attendance. This could confirm that there is very little evidence indeed to even start to suggest that poor attendance on its own is a cause of poor performance.
- 7.4.4 Note the difference between the strength of the relationship between attendance and attainment when aggregating pupil level data into attainment levels and analysing 'raw' pupil level data, i.e. a much stronger relationship exists in the former. This confirms the likelihood of a circular and potentially misleading relationship between attainment and attendance mentioned in Paragraph 7.4.1.
- 7.4.5 Table 7 also shows that the relationship between attendance and attainment is marginally stronger between the percentage of broken weeks and attainment than between percentage attendance and attainment. This is evidenced by the higher correlation coefficients in all three subjects, particularly English. This suggests that recurrent, short-term spells of absence are related more strongly to lower levels of attainment than longer one-off periods of absence.

Table 7: Correlation between KS2 Subject Sub-Points and % Attendance/% Broken Weeks

KS2 Sub-Points vs. Attendance		Correlation Coefficient ³⁹	
		% Attendance	% Broken Weeks
KS2 Subject	English	-0.02	-0.21
	Maths	0.19	-0.22
	Science	0.21	-0.24

- 7.4.6 The next section will attempt to take this analysis a stage further by controlling for the problem of using 'raw' attainment, i.e. factoring out the fact that pupils display different levels of attainment depending on their different contextual characteristics. It will do this by examining the relationship between attendance and 'raw' progress, i.e. assuming pupils with differing contextual characteristics are more likely to display equal levels of progress.

³⁸ R² is known as the Coefficient of Determination and is the proportion of variability in a data set that is accounted for by a statistical model. In this case the Correlation Coefficient of 0.20 is squared to get 0.04, or 4%.

³⁹ Pearson R Correlation Coefficient: +1 perfect linear positive relationship, 0 no relationship and -1 perfect linear negative relationship.

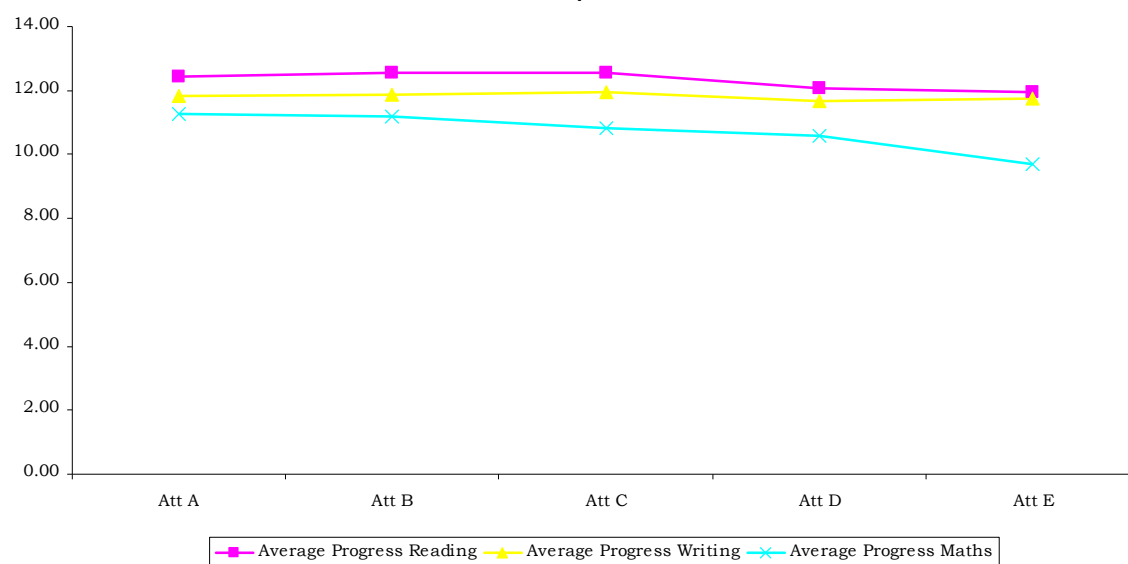
8.0 Progression Model

- 8.0.1 This section will investigate if there is a relationship between attendance and progression of the chosen Key Stage 2 cohort in Reading, Writing and Maths. It will also attempt to investigate the strength and extent of this relationship.
- 8.0.2 Progression is measured in terms of average Curriculum points score between Key Stage 1 and Key Stage 2 in Reading, Writing and Maths.
- 8.0.3 Using a pupil's progress instead of their 'raw' attainment should overcome the problem of potentially higher attaining pupils being more likely to attend school and display lower levels of absence. However, this is based on the assumption that, disregarding other factors, all pupils are expected to progress by a similar amount no matter what their contextual factors. It has been well documented that this is not the case, for example, pupils eligible for free school meals, on average, make less progress than non-FSM pupils.⁴⁰

8.1 Attendance Groups

- 8.1.1 There is no statistically significant difference in the average Curriculum Points Progress between the Attendance Groups for Writing; a statistically significant difference between the Attendance Groups in Reading; and an extremely statistically significant difference between the Attendance Groups in Maths.⁴¹

Figure 17: Average Points Progress between Key Stage 1 and Key Stage 2 by Attendance Groups



- 8.1.2 Figure 17 shows that the largest difference between the Attendance Groups for average Curriculum Points Progress in Reading is between Attendance Groups A/B/C and Attendance Groups D/E. However, the

⁴⁰ Office for National Statistics, *Statistics of Education: Pupil Progress by Pupil Characteristics 2002*, June 2003.

⁴¹ Analysis of Variance (ANOVA) - only tells you that there is a statistically significant difference; it does not tell you where this difference is.

drop is very small. There is only a very slight relationship between attendance and progression in Reading, i.e. as absence increases average Curriculum Points Progress in Reading reduces slightly. There is no such relationship between average Curriculum Points Progress in Writing and levels of absence.

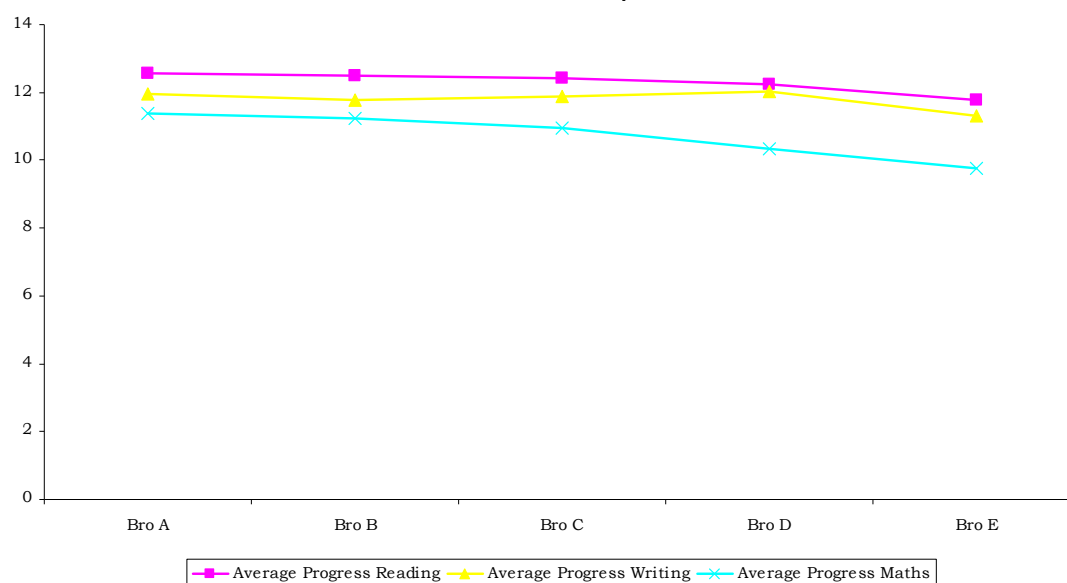
8.1.3 Figure 17 also shows very clearly the significant differences that exist in the average Curriculum Points Progress between the Attendance Groups in Maths. There is only a relatively weak relationship here between attendance and progression in Maths, i.e. as absence increases average Curriculum Points Progress in Maths fall. This is particularly true of the bottom Attendance Group, Att E, where the drop is large.

8.1.4 These results would appear to suggest that progress between Key Stage 1 and Key Stage 2 in Reading and Writing will not be greatly affected by a pupils' absence from school. However, this is not so true for progress between Key Stage 1 and Key Stage 2 in Maths. As mentioned earlier this is not too surprising considering Maths is a more hierarchical and knowledge based subject.

8.2 Broken Weeks Groups

8.2.1 There is no statistically significant difference in the average Curriculum Points Progress between the Broken Weeks Groups for Reading and Writing and an extremely statistically significant difference between the Broken Weeks Groups in Maths.⁴²

Figure 18: Average Points Progress between Key Stage 1 and Key Stage 2 by Broken Weeks Groups



8.2.2 Figure 18 shows very clearly the significant differences that exist in the average Curriculum Points Progress between the Broken Weeks Groups in Maths. As with the Attendance Groups, there is a relationship here between attendance and progression in Maths, i.e.

⁴² Analysis of Variance (ANOVA) - only tells you that there is a statistically significant difference; it does not tell you where this difference is.

as absence increases average Curriculum Points Progress in Maths falls. This is particularly true of the bottom two Broken Weeks Groups where the drop is larger. However, as with the Attendance Groups, this relationship is not particularly strong.

8.2.3 Furthermore, there doesn't appear to be a significant difference between the effect on progression between the Attendance Groups and Broken Weeks Groups. This would suggest that frequent periods of absence over a long period are not having any greater affect on progress in Maths than longer one-off periods of absence.

8.3 General Relationship?

8.3.1 As with attainment, we need to be confident that the findings we have seen so far between progress and attendance are not just a result of the chosen Attendance Groups and Broken Weeks Groups.

8.3.2 The charts in Appendices 7 and 8 confirm that only in Maths is there a relationship between attendance and progression, i.e. as progress reduces average levels of absence increase. However, due to there being only three classification groupings for Maths we cannot say with confidence that this is a strong relationship. The evidence already seen from the Attendance Groups and Broken Weeks Groups analysis would suggest that this relationship is in fact relatively weak.

8.3.3 Furthermore, the charts in Appendices 7 and 8 do not appear to show a significant difference between the strength of the relationship for the percentage absence and percentage of broken weeks. This would confirm the finding from the analysis of the Attendance Groups and Broken Weeks Groups, i.e. frequent periods of absence over a long period are not having any greater affect on progress in Maths than longer one-off periods of absence.

8.4 Relationship or Causation?

8.4.1 As with attainment in Section 7.0, establishing causality between lower levels of attendance and poorer progress is a long way from being established and the analysis so far does not provide sufficient evidence to even start suggesting a causal relationship.

8.4.2 There is a correlational relationship though between attendance and progress in Maths between Key Stage 1 and Key Stage 2, i.e. those pupils with poorer attendance, on average, make less progress in Maths. However, this relationship is not strong.

8.4.3 No such relationship exists for progress in Reading or Writing between Key Stage 1 and Key Stage 2. This reinforces the finding in Paragraph 7.4.2, i.e. that a compounding factor or set of factors is causing us to misread a relationship between attendance and 'raw' attainment, particularly in English.

8.4.4 We have already seen in Paragraphs 7.1.2 and 7.2.2 that the strongest relationship between attendance and attainment exists with those pupils who achieve level 5 in Maths and Science. The results

from this section would appear to confirm this, i.e. that, on average, pupils with high levels of absence progress less well in the hierarchical and knowledge based subjects.

- 8.4.5 The next section will attempt to take this analysis to the final stage by controlling for the problem of using 'raw' progress, i.e. factoring out the fact that pupils display different levels of progress depending on their different contextual characteristics. It will do this by examining the relationship between attendance and achievement, i.e. assuming pupils with differing contextual characteristics are likely to display different levels of progress.

9.0 Achievement Model

9.0.1 This section uses FFT estimates in order to control further for contextual factors. For example, a pupil's progress is calculated on the basis of what similar pupils in similar schools have progressed by, i.e. a pupil who is eligible for free school meals will likely to have a lower estimate of progression than a non-FSM pupil, all other things being equal. However, this data does not take into account a pupil's behaviour (unless classified as a Special Educational Need) nor their general motivation and personal family circumstances (although it could be argued that these factors are to some degree taken into account by their previous attainment if they existed at the time of their Key Stage 1 assessment).

9.1 Attendance Groups

9.1.1 The charts in Appendix 9 show the percentage of pupils in each FFT Achievement Classification Group⁴³ by Attendance Group and Key Stage 2 SATS subject. If there was a clear relationship between achievement and attendance then we would expect to see a decrease in the proportion of pupils who performed above and in-line with their FFT estimate as you progress from the highest to the lowest Attendance Group (A to E). Likewise, you would also expect to see a corresponding increase in the proportion of pupils who performed below their FFT estimate as you progress from the highest to the lowest Attendance Group (A to E).

9.1.2 In English it is clear that this relationship is only in part displayed, i.e. between attendance and underachievement. There is no association between the proportion of pupils who achieved above their FFT estimate and attendance. In fact, it is the highest Attendance Group that displays the lowest proportion of pupils who exceeded their FFT estimate! This would suggest that there is no real meaningful relationship between attendance and achievement in English at Key Stage 2. However, there is a clear and identifiable association between increasing proportions of pupils who underachieve and increasing rates of absence.

9.1.3 The relationship displayed in Maths and Science is somewhat clearer than for English, i.e. there is a relationship between increased levels of absence and a decrease in the proportion of pupils who exceeded their FFT estimate. This reinforces that a meaningful relationship exists between attendance and achievement in Maths and Science found earlier (Paragraphs 7.1.2 and 8.3.2). However, this association, although in the right direction, does not appear to be particularly strong.

⁴³ Defined in Table 5

9.2 Broken Weeks Groups

9.2.1 The charts in Appendix 10 show the percentage of pupils in each FFT Achievement Classification Group by Broken Weeks Group and Key Stage 2 SATS subject.

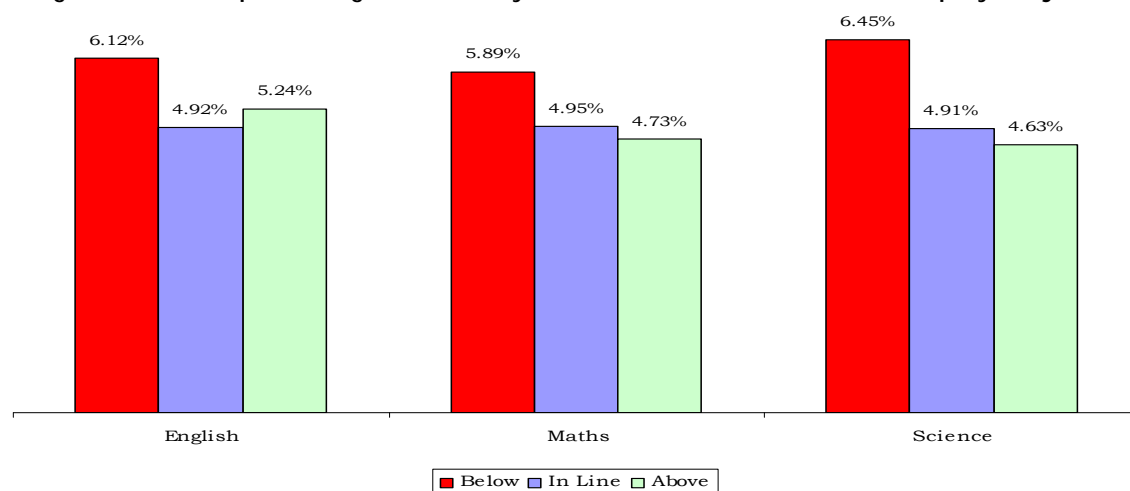
9.2.2 The relationships found for the Attendance Groups (Section 9.1) is very similar to that displayed by the Broken Weeks Groups, i.e. no real meaningful association between attendance and achievement in English, but a real and meaningful association between attendance and achievement in Maths and Science. However, as with the Attendance Groups this relationship seen in Maths and Science is not particularly strong.

9.2.3 Furthermore, there appears to be no clear identifiable difference in the achievement of pupils between the Attendance Groups and the Broken Weeks Groups. However, there are relatively small differences between the percentages that underachieved between the bottom Attendance Group and the bottom Broken Weeks Group. This would tend to confirm that pupils who display the highest level of frequent absences over a long period are marginally more at risk from underachieving at Key Stage 2 than pupils who display relatively high rates of absences, albeit fewer in frequency.

9.3 General Relationship?

9.3.1 As with attainment and progress, we need to be confident that the findings we have seen so far are not just a result of the chosen Attendance Groups and Broken Weeks Groups.

Figure 19: Mean percentage absence by Achievement Classification Group by Subject



9.3.2 Figure 19 shows the mean percentage absence for each achievement classification group by Key Stage 2 subject. There is a statistically significant difference between the mean percentage absence for those pupils who did not achieve their FFT estimate and the mean percentage absence for those pupils who did achieve their FFT estimate in all three subjects. There is no statistically significant difference between the mean percentage absence for those pupils who did achieve their FFT estimate and the mean percentage absence

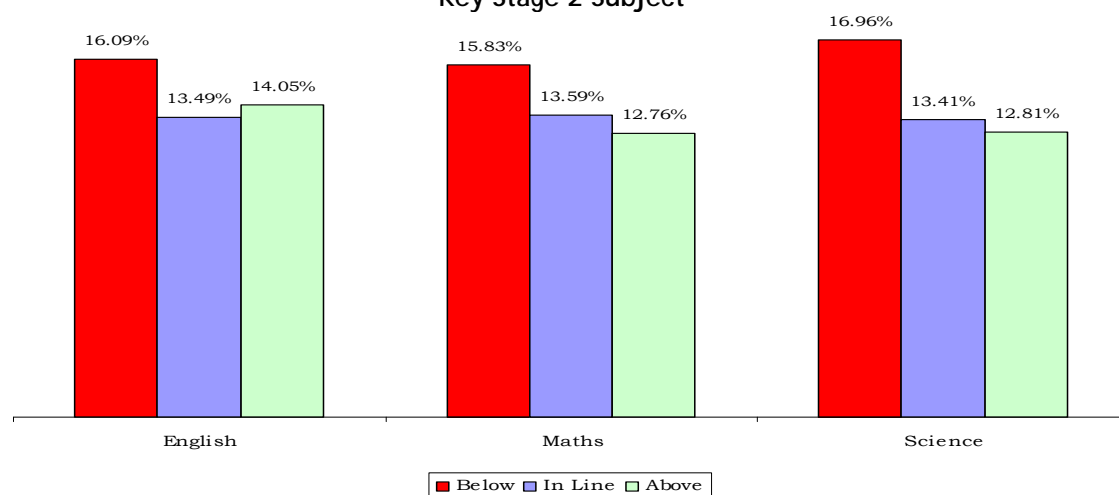
for those pupils who exceeded their FFT estimate in all three subjects.

9.3.3 Figure 19 appears to confirm the findings from the analysis of the Attendance Groups and Broken Weeks Groups, i.e. no real meaningful relationship between attendance and achievement in English and a relatively weak relationship between attendance and achievement in Maths and Science.

9.3.4 There appears to be a clear association though between levels of absence and those pupils who underachieved in English, Maths and Science, i.e. those pupils who underachieved displayed, on average, significantly lower levels of attendance than those who either met or exceeded their FFT estimate.

9.3.5 Figure 19 would appear to suggest that once a critical level of attendance is reached then there is no significant benefit to be gained from improving attendance further.

Figure 20: Mean percentage of Broken Weeks by Achievement Classification Group and Key Stage 2 Subject



9.3.6 Figure 20 shows the mean percentage of broken weeks for each achievement classification group by Key Stage 2 subject. There is a statistically significant difference between the mean percentage of broken weeks for those pupils who did not achieve their FFT estimate and the mean percentage of broken weeks for those pupils who did achieve their FFT estimate in all three subjects. There is no statistically significant difference between the mean percentage of broken weeks for those pupils who did achieve their FFT estimate and the mean percentage of broken weeks for those pupils who exceeded their FFT estimate in all three subjects.

9.3.7 Figure 20 confirms the relatively weak relationship seen between levels of absence and achievement in Figure 19 for Maths and Science.

9.3.8 Figure 20 also confirms the clear association between levels of absence and those pupils who underachieve in English, Maths and Science, i.e. those pupils who underachieved displayed, on average, significantly higher levels of broken weeks.

9.3.9 Figure 20 also confirms the suggestion that once a critical level of attendance is reached then there is no significant benefit to be gained from improving attendance further.

9.4 Relationship or Causation?

9.4.1 The key question is whether there is a causal link between attendance and achievement. The tests for causality (Section 3.0) appear to have failed at the first hurdle, i.e. the existence of a strong relationship. However, there appear to be issues worthy of further consideration.

9.4.2 The fact that there appears to be only a relatively weak relationship for Maths and Science (and none in the case of English) between the highest levels of attendance and highest levels of achievement would indicate that the mere fact of attending school 100% of the time instead of say, 90% of the time, is unlikely to significantly increase the chance of a pupil exceeding their FFT estimate. However, there may still be a very small amount of benefit to be gained in improved attendance for Maths and Science.

9.4.3 What is clear though is that those pupils who underachieved at Key Stage 2 displayed significantly higher levels of average absence than pupils who either met or exceeded their FFT estimate (Figure 19 and Figure 20). In English 8% of pupils performed more than one sub-level below their FTT estimate⁴⁴ and consequently were classified as having underachieved. The percentage of pupils similarly classified as having underachieved in Maths and Science was the same, at 13%. The key question for further exploration is whether those pupils who underachieved did so as a direct result of their high levels of absence. If this was the case then you would expect to see a much higher percentage of these underachieving pupils in the bottom Attendance Group and Broken Weeks Group. However, pupils who underachieved only made up 12% of the bottom Attendance Group in English, 22% in Maths and 21% in Science.⁴⁵ Therefore, the majority of pupils in the bottom Attendance Group still managed to either meet or exceed their FFT estimate by at least one sub-level.

9.4.4 Furthermore, if high rates of attendance were strongly associated with underachievement then you would also expect a significantly higher proportion of pupils eligible for free school meals and pupils classified with special education needs to be underachieving. This is because of the findings in Section 5.0 and 6.0, i.e. pupils eligible for free school meals and pupils classified as having a special education need display, on average, the highest levels of absence. Figure 21 shows that this is not entirely the case, i.e. pupils eligible for free school meals⁴⁶ did not display significantly higher than expected proportions of pupils who underachieved in English, Maths and Science. However, pupils classified as having a special education

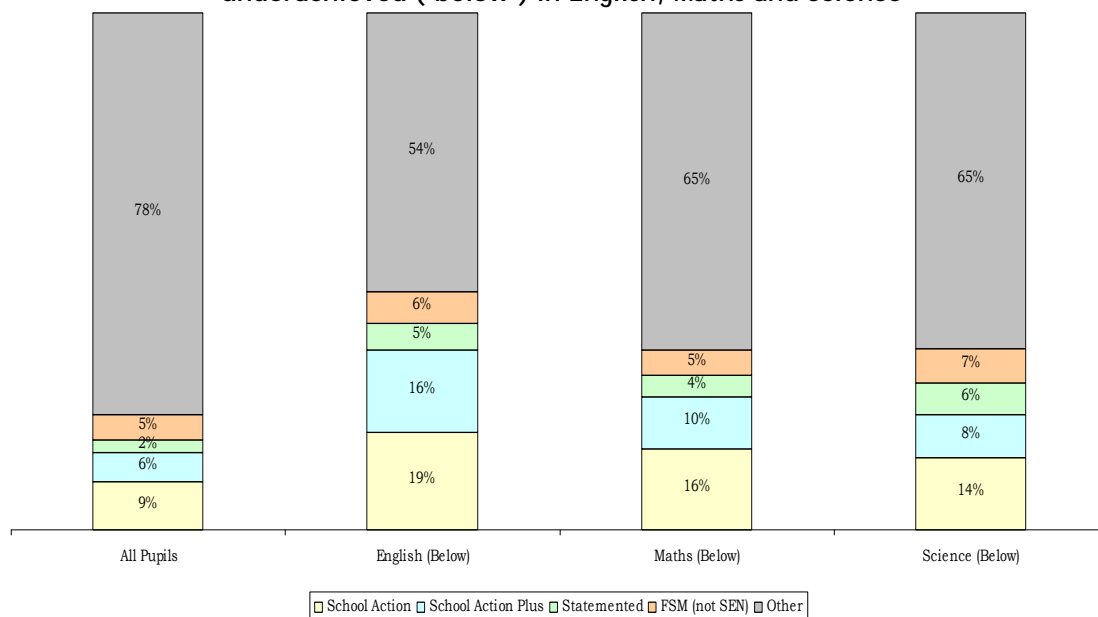
⁴⁴ Table 6

⁴⁵ Appendix 9

⁴⁶ And **not** classified as having a special educational need.

need did display significantly higher than expected proportions of pupils who underachieved in English, Maths and Science.

Figure 21: Graph showing the percentages of SEN and FSM pupils for those who underachieved ('below') in English, Maths and Science



9.4.5 There is certainly no evidence of a clear causal link between high rates of absence and an increased risk of underachievement. Furthermore, any association between the two is not particularly strong and just confirms the findings so far that the link between attendance and achievement is relatively weak. Despite this finding though it is clearly necessary for pupils to be in school⁴⁷.

9.4.6 As mentioned in Paragraph 7.4.1, there is likely to be a circular link between high levels of absence and underachievement as pupils may well be missing school as a direct result of them underachieving as they lose motivation. Only a further qualitative piece of research will be likely to confirm this link though.

9.4.7 Of the 273 pupils who were in the bottom Broken Weeks Group⁴⁸, 50% were either eligible for free school meals or classified as having a special educational need. Of these eight to ten percent of the poorest attending pupils it would appear that putting extra resources and effort into getting pupils classified as having special education needs to attend school and participate more fully are probably going to have the biggest impact on their achievement at Key Stage 2. Putting significant resources and effort into trying to improve the attendance of the other ninety or so percent of pupils is unlikely to have anywhere near as significant effect on improving their achievement, particularly in English.

9.4.8 Pupils from low income households⁴⁹, even though they displayed the highest level of average absence (Figure 16), still managed to achieve

⁴⁷ Refer to quote in Section 2.

⁴⁸ Table 2.

⁴⁹ Using eligibility for free school meals as a proxy and excluding FSM pupils with a special educational need.

or exceed their FFT estimates in the proportions expected. This appears to confirm the relatively poor association between attendance and achievement already mentioned. However, it would clearly be wrong to take this finding as just acceptance of the poor attendance of pupils eligible for free school meals. It could be argued that just using FFT Type B estimates without an element of sufficient challenge in target setting is just perpetuating the underperformance of pupils from low income families.

9.5 Borderline Pupils

9.5.1 If attendance really was having a positive effect on improving achievement of pupils then we would expect to see a strong relationship between increasing levels of attendance and improved achievement, in particular, of borderline pupils.

9.5.2 Appendices 11 and 12 show the percentages of borderline pupils⁵⁰ in each FFT Classification Group by Attendance Groups and Broken Weeks Groups respectively. The relationships expected are by no means clear and it would appear that attendance has little influence on whether a borderline pupil manages to exceed their FFT estimate to meet or exceed the minimum expected Key Stage 2 sub level of 4c.

⁵⁰ Borderline pupils are those whose FFT estimate was sub-level 3A.

10.0 Conclusion

- 10.1 When school level data is analysed it has been shown that academic attainment is strongly related to absence levels, i.e. higher levels of attainment are associated with greatly reduced levels of absence. However, when analysing pupil level data a much weaker association between higher levels of attainment and higher rates of attendance is displayed. This association is stronger in Maths and Science than in English.
- 10.2 Even when controlling for prior attainment, month of birth, gender, social background and school background there is still only a weak relationship between attendance and achievement. However, there are many other factors that have still not been controlled for and it maybe that these 'other' factors are more likely to be responsible for poor levels of attendance and achievement at the same time. They might include a change in family circumstances and deterioration in behaviour and motivation since Key Stage 1. These factors have been referred to as confounding factors as they have a negative effect on attendance and achievement and are difficult to separate out as they are not things that are separately measured.
- 10.3 It would appear that once a critical level of attendance has been reached there is no significant benefit to be gained from improving attendance further, this is particularly true for English.
- 10.4 The analysis shows that pupils classified as having a special educational need are more at risk from performing below their FFT estimate. SEN pupils also display higher than average levels of absence. It is this group of pupils that are more likely to benefit from a concerted effort to get them attending school on a regular basis. However, this is unlikely to work on its own as their behaviour and motivation are probably areas that need to be addressed alongside their poorer attendance.
- 10.5 In common with other more detailed national research, the findings in this research project have failed to establish a causal link between attendance and performance (attainment and achievement) at Key Stage 2.

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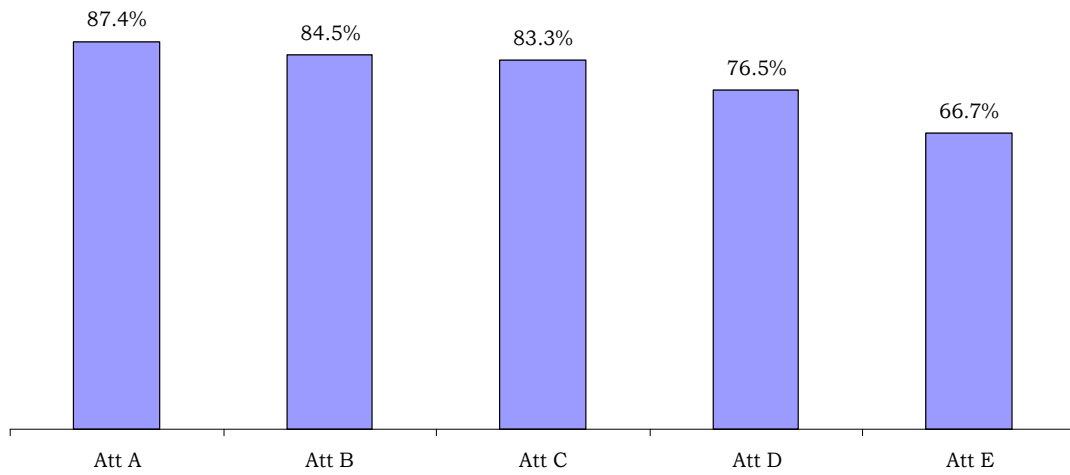
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APPENDICES

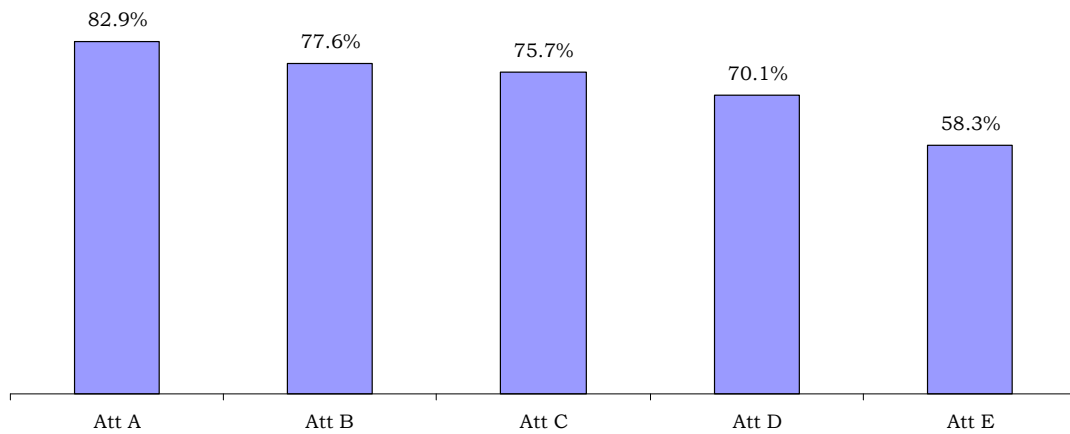
APPENDIX 1

Charts for Attendance vs. Attainment (% Level 4 and above) Attendance Groups

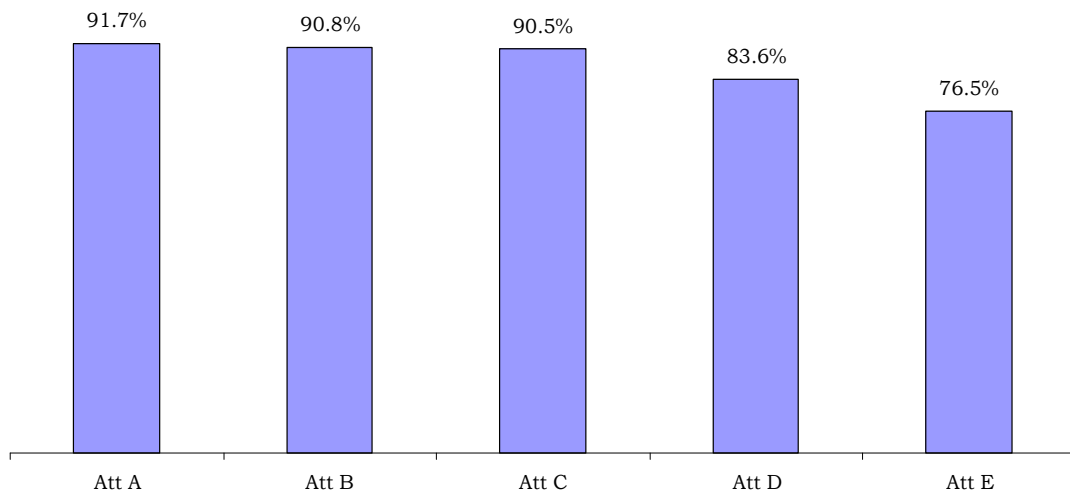
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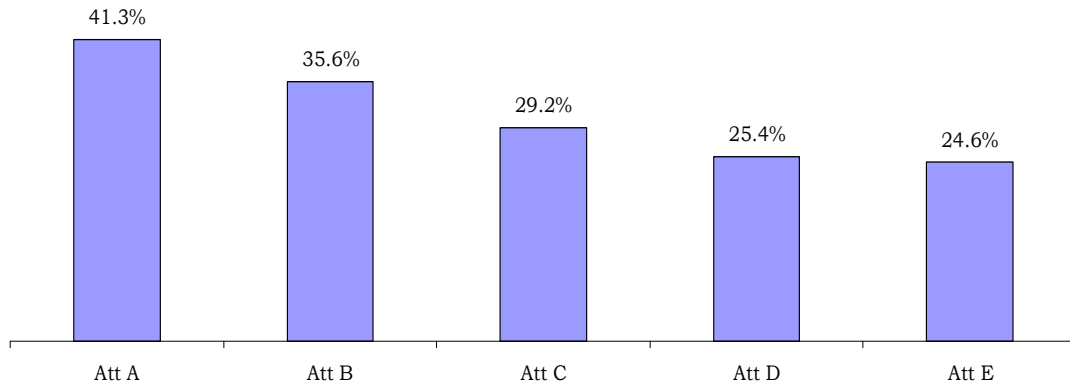
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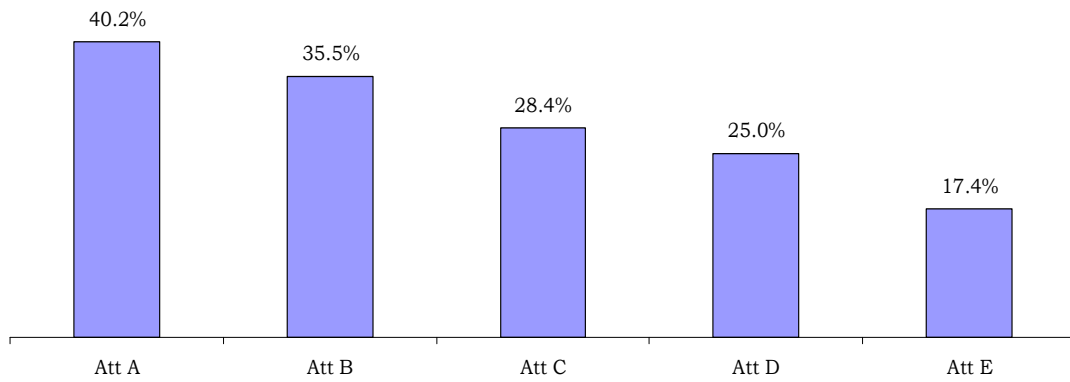
APPENDIX 2

Charts for Attendance vs. Attainment (% Level 5) Attendance Groups

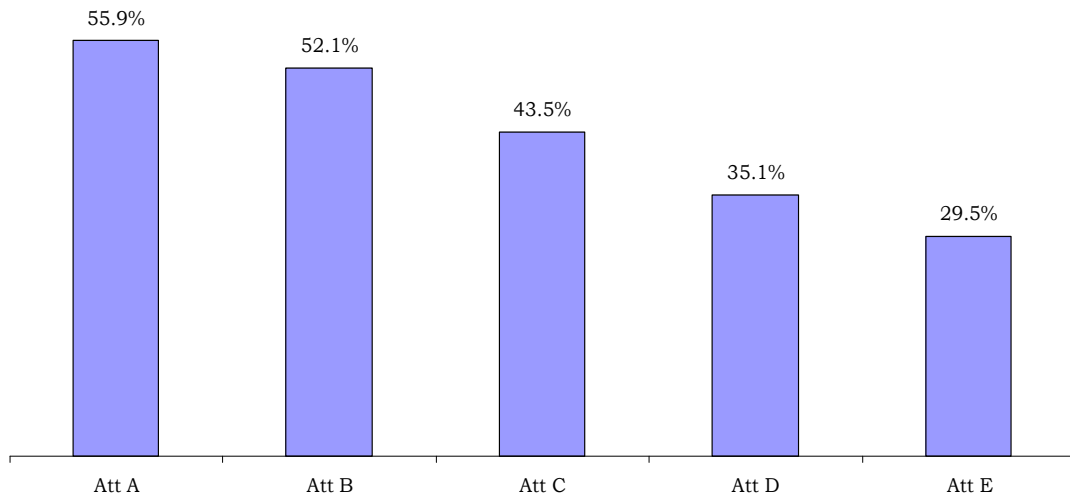
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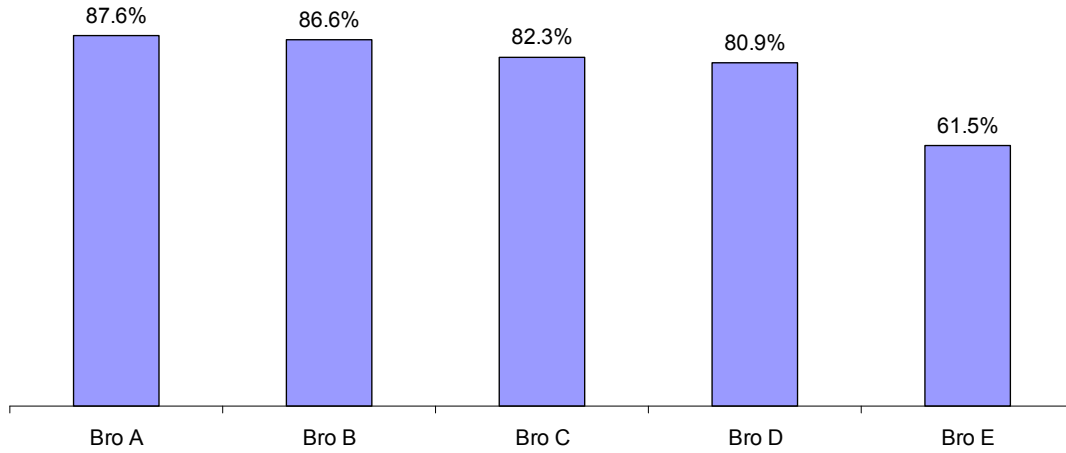
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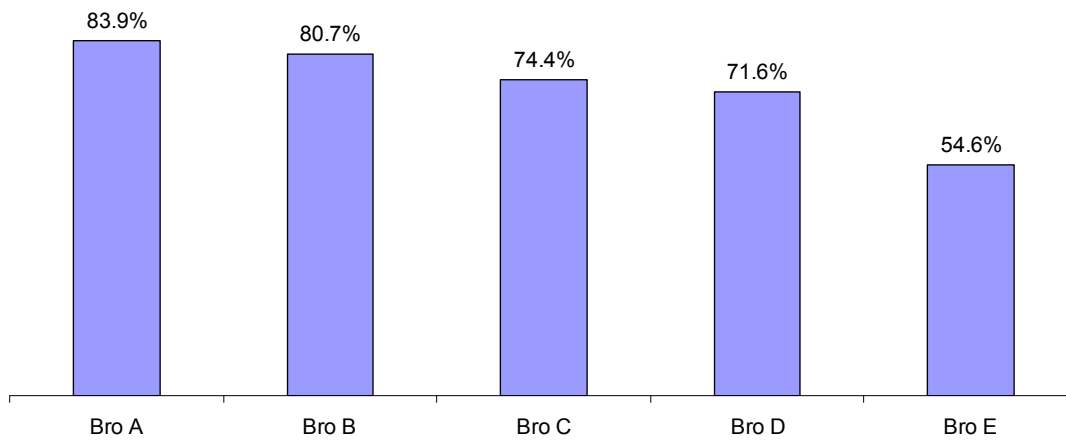
APPENDIX 3

Charts for Attendance vs. Attainment (% Level 4 and above) Broken Weeks Groups

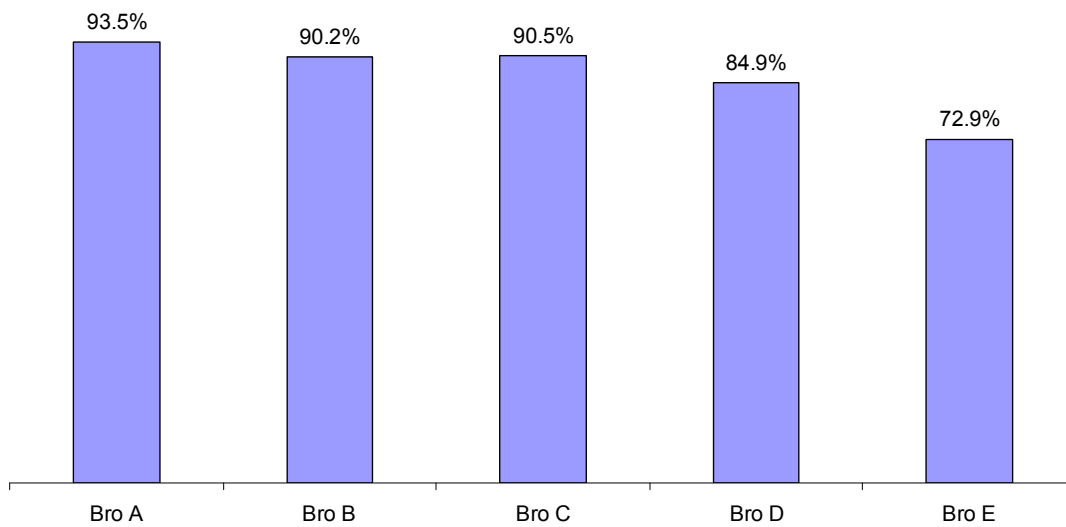
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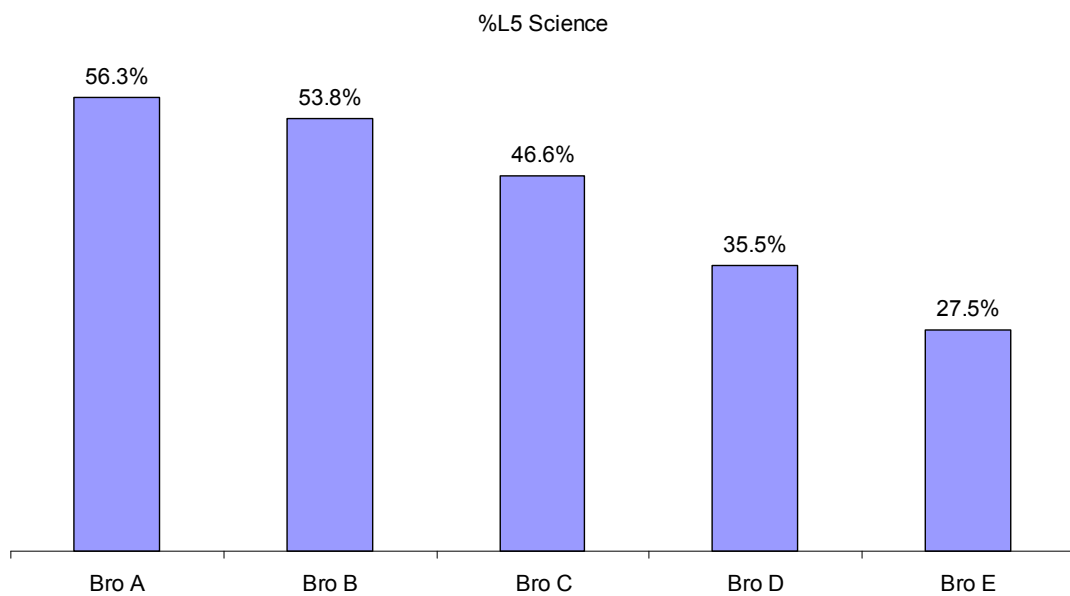
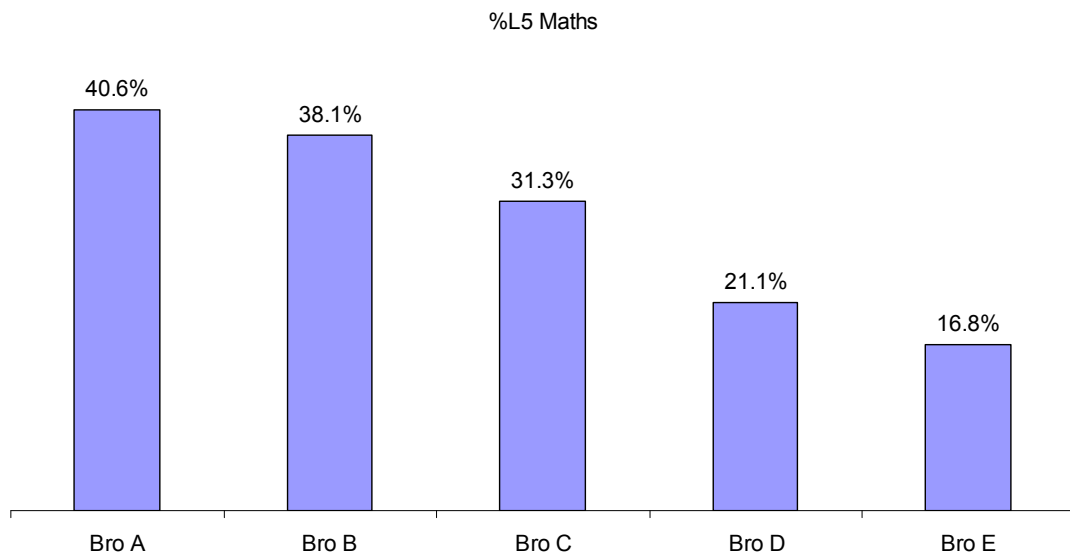
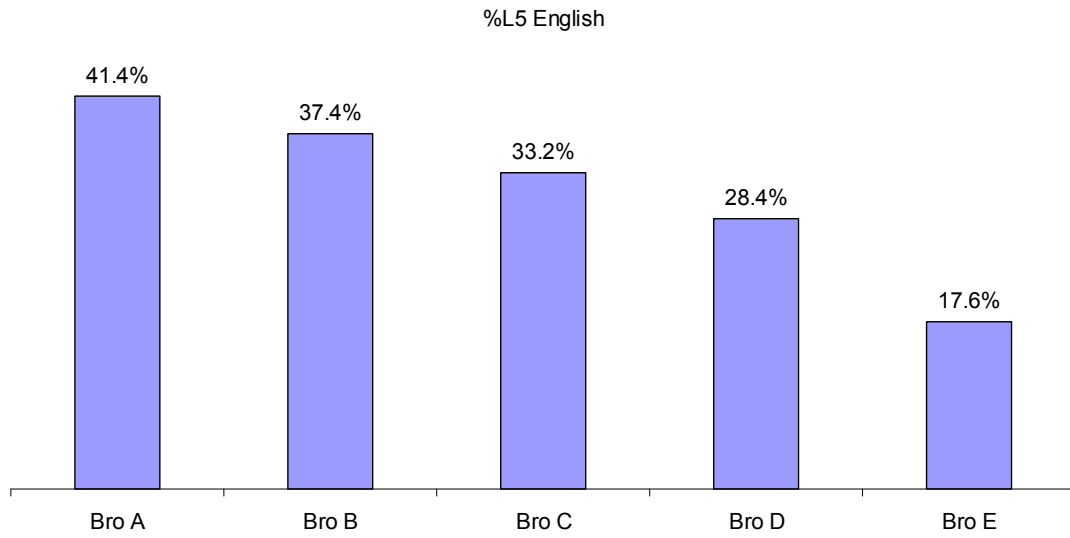


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APPENDIX 4

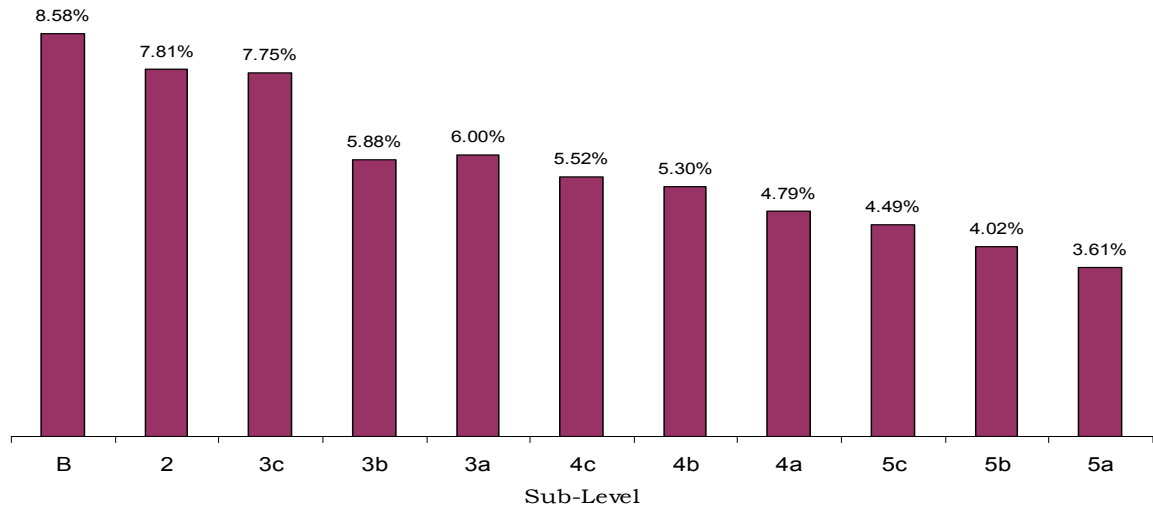
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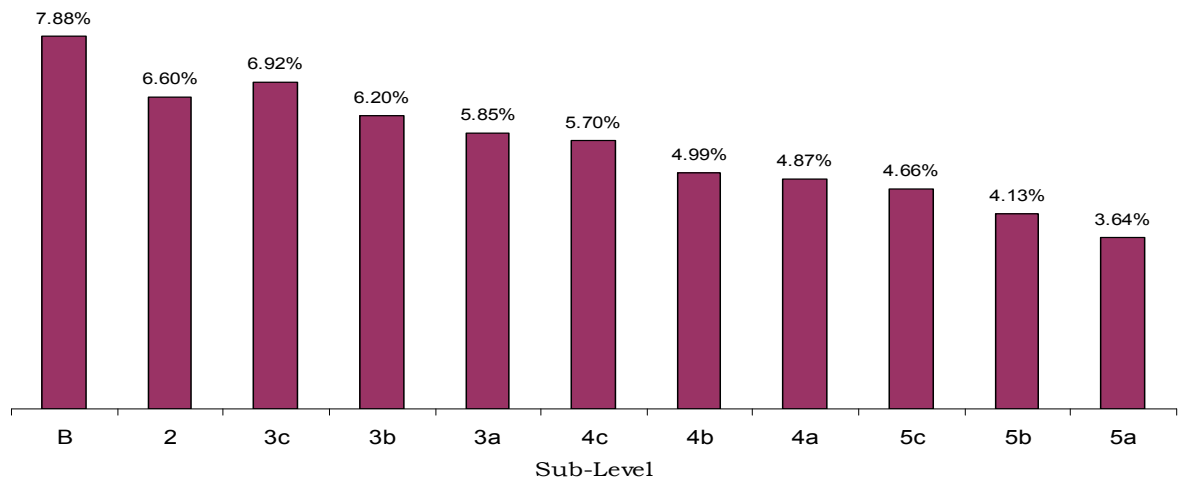
APPENDIX 5

Charts showing Mean % Absence by KS2 Subject and Sub-Level

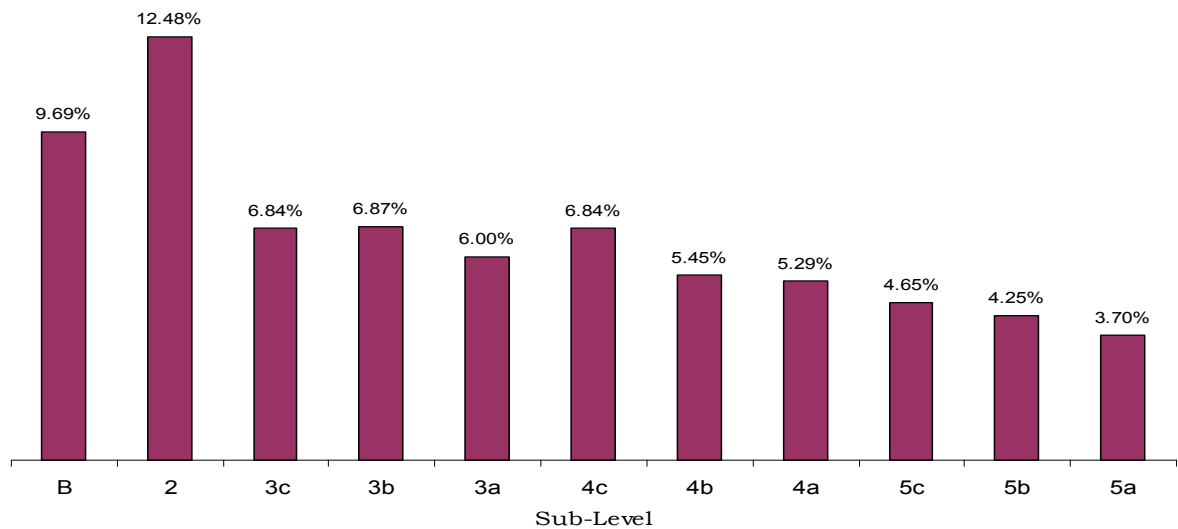
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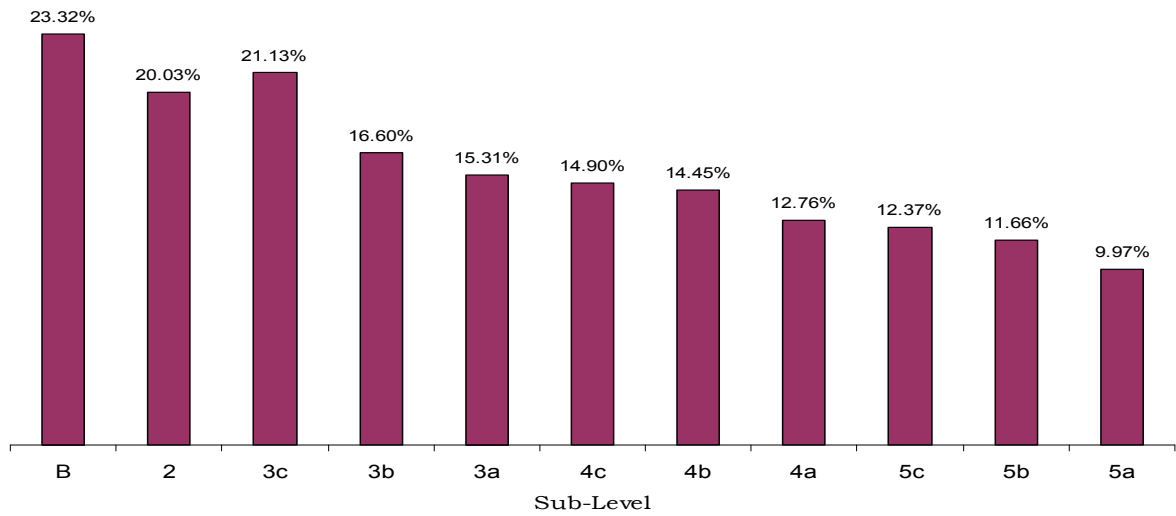
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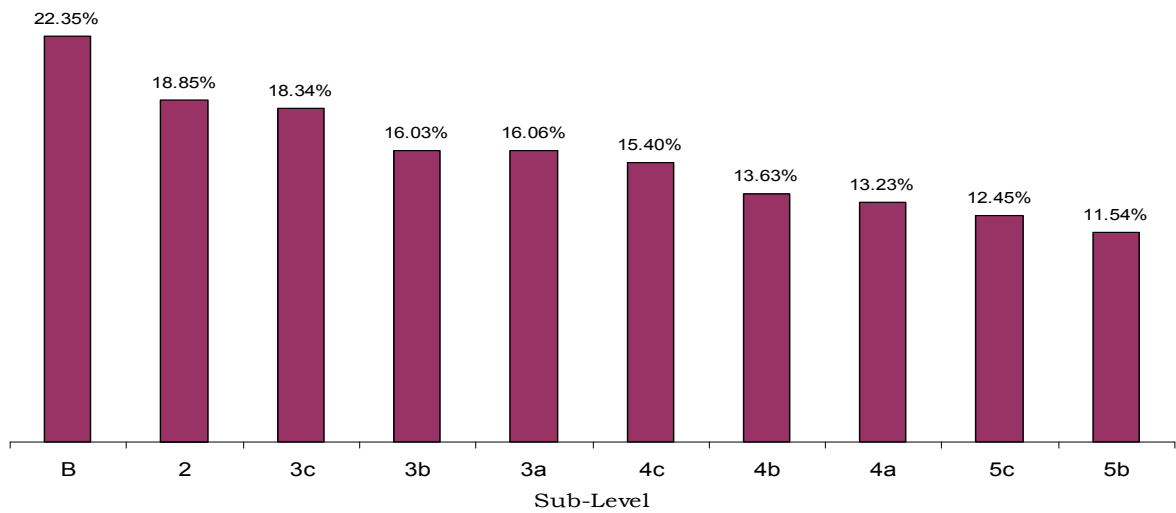
APPENDIX 6

Charts showing Mean % Broken Weeks by KS2 Subject and Sub-Level

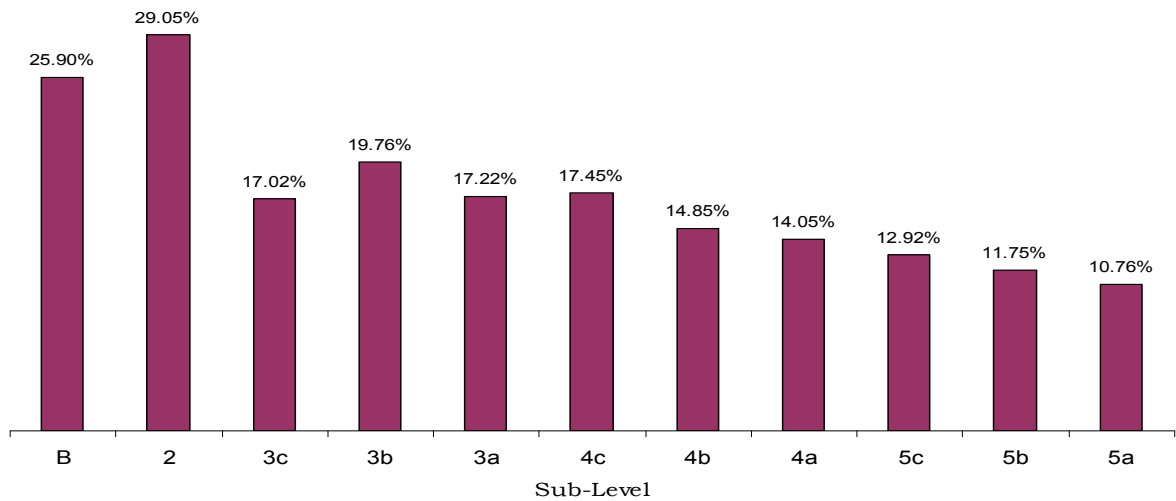
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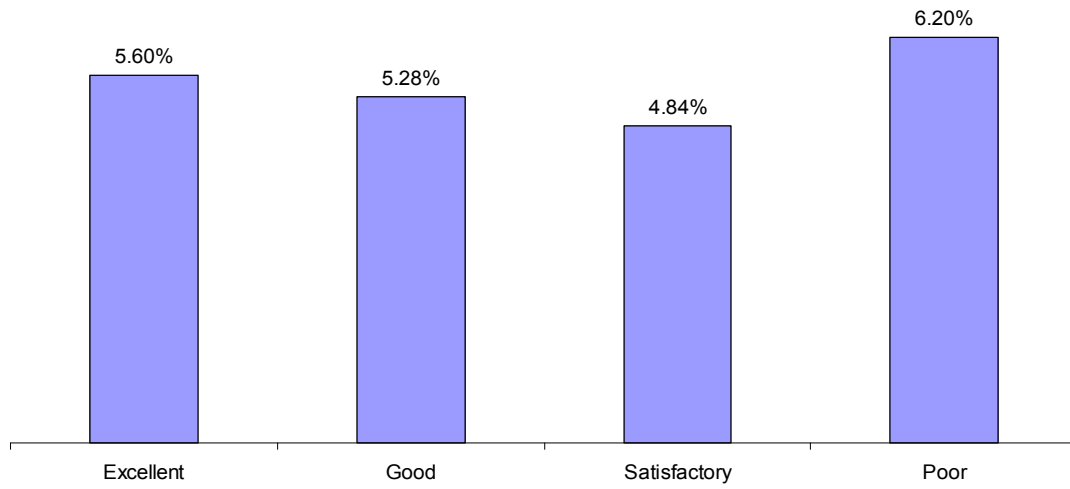
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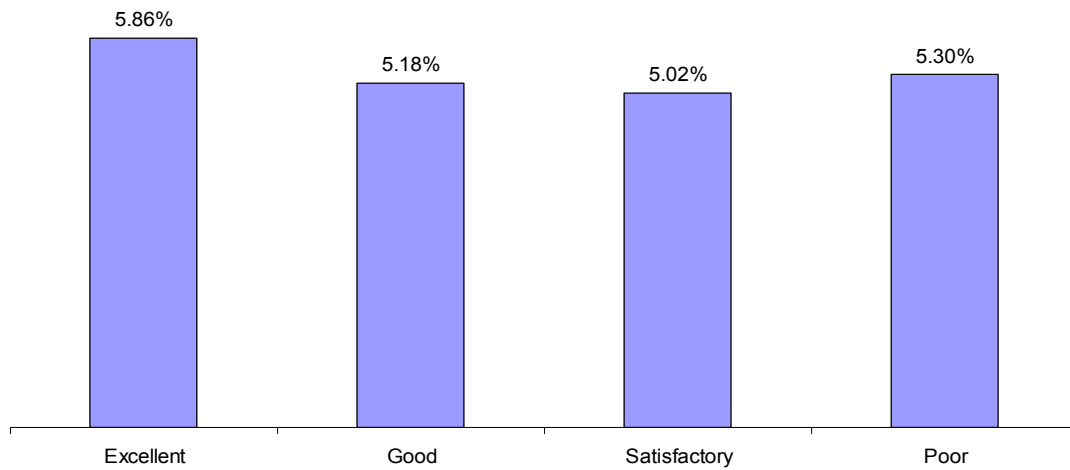
APPENDIX 7

Charts showing Mean % Absence by KS1 to KS2 Progression Category

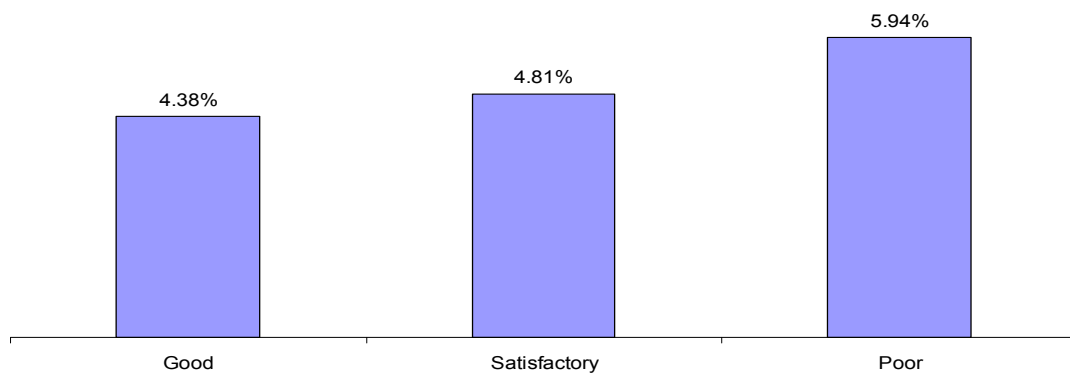
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Writing



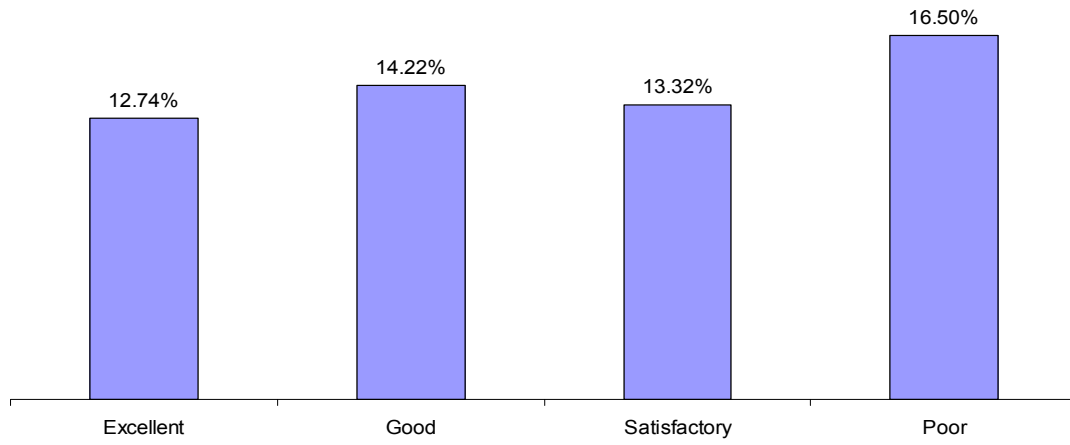
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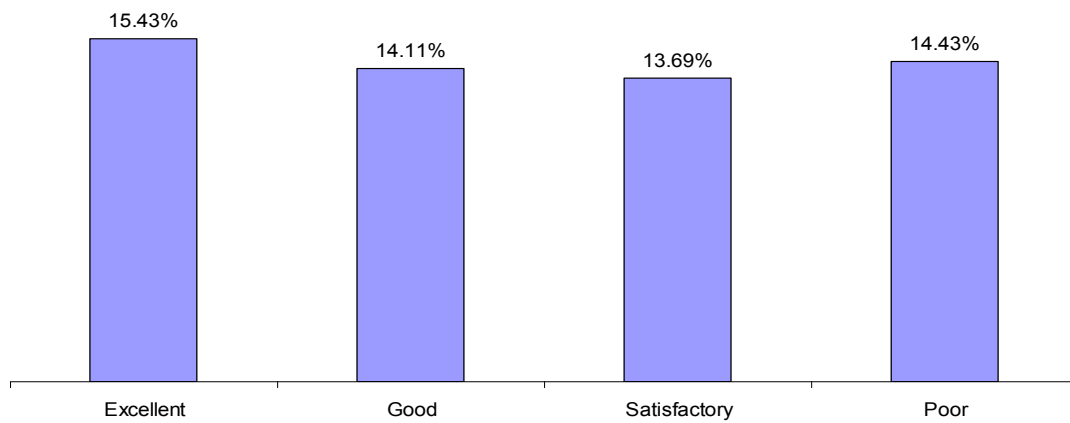
APPENDIX 8

Charts showing Mean % of Broken Weeks by KS1 to KS2 Progression Category

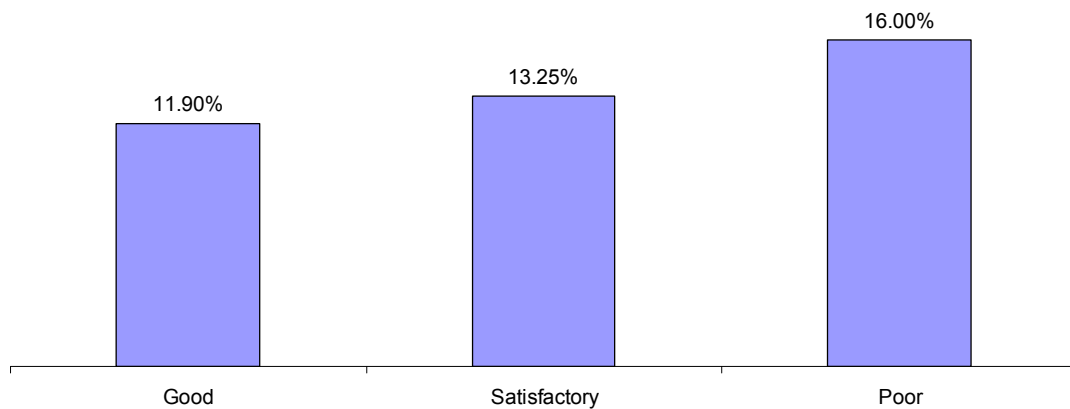
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Writing



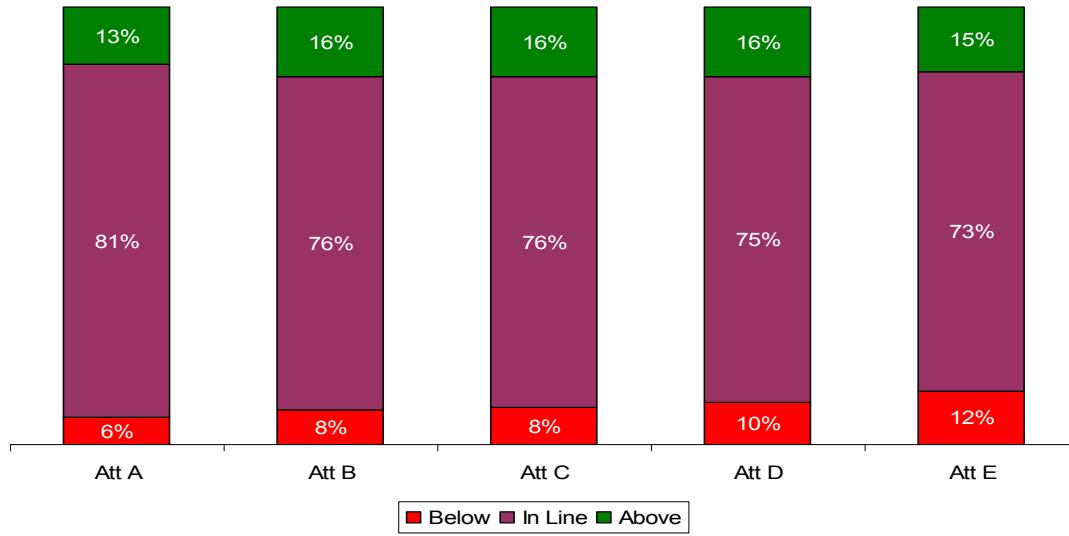
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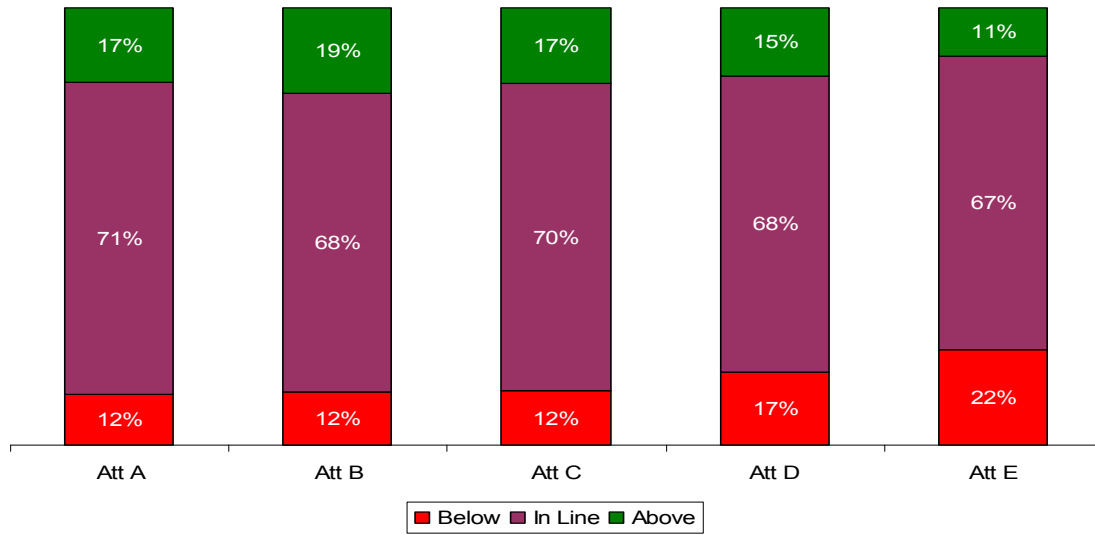
APPENDIX 9

Charts showing percentage of pupils in each FFT Achievement Classification Group by Attendance Groups and Key Stage 2 Subject

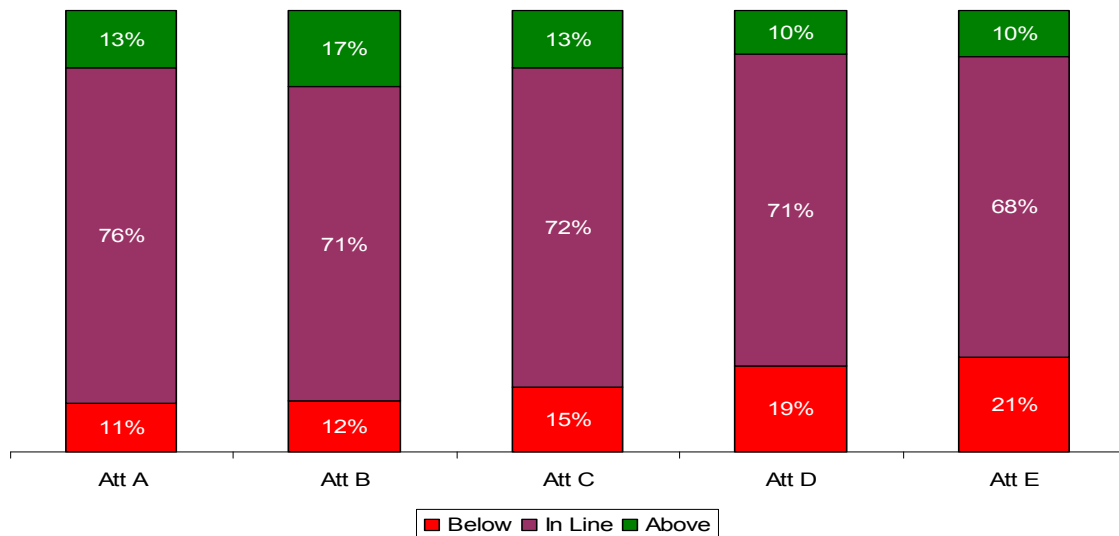
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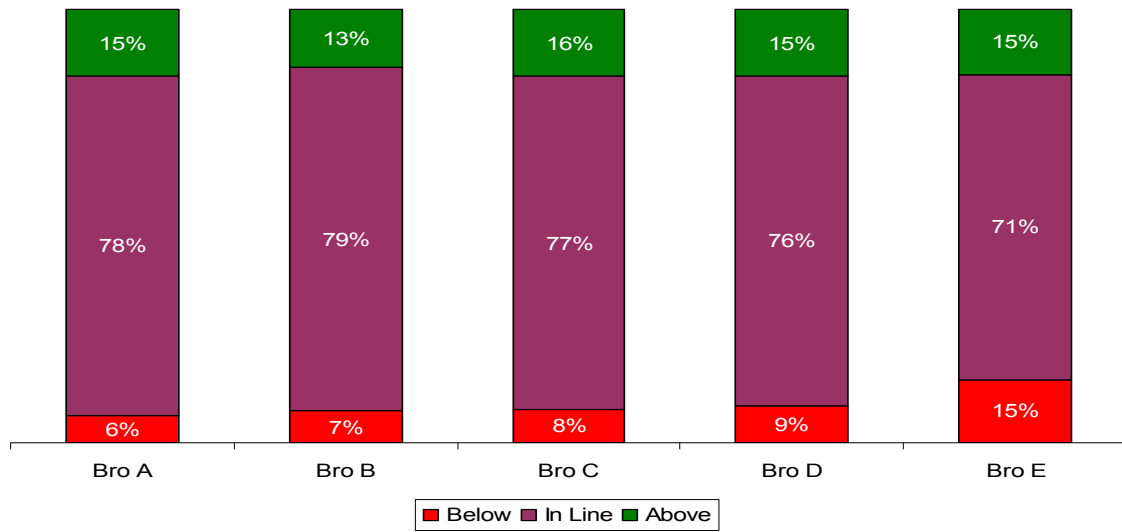
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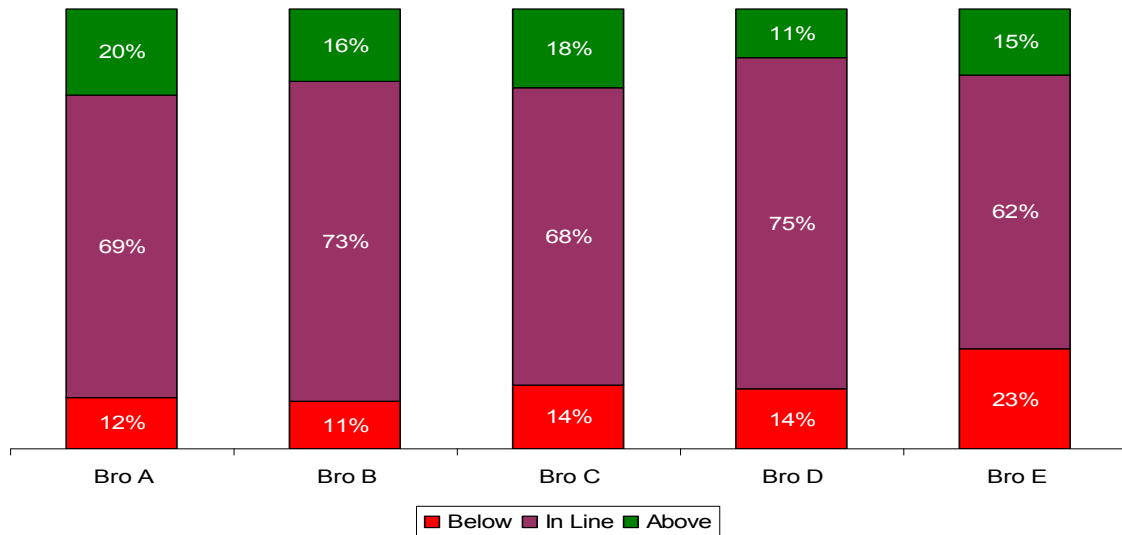
APPENDIX 10

Charts showing percentage of pupils in each FFT Achievement Classification Group by Broken Weeks Groups and Key Stage 2 Subject

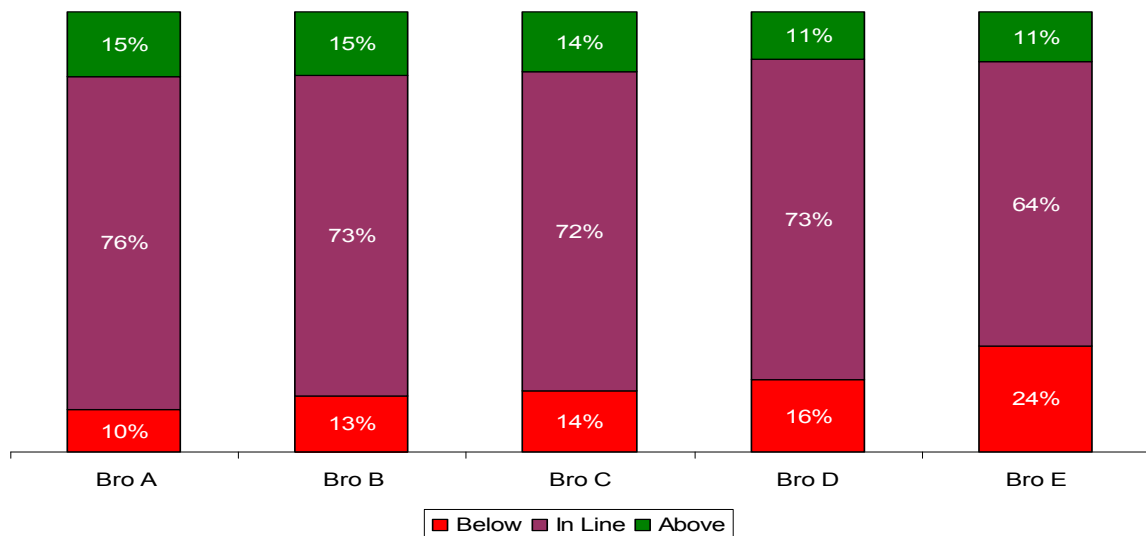
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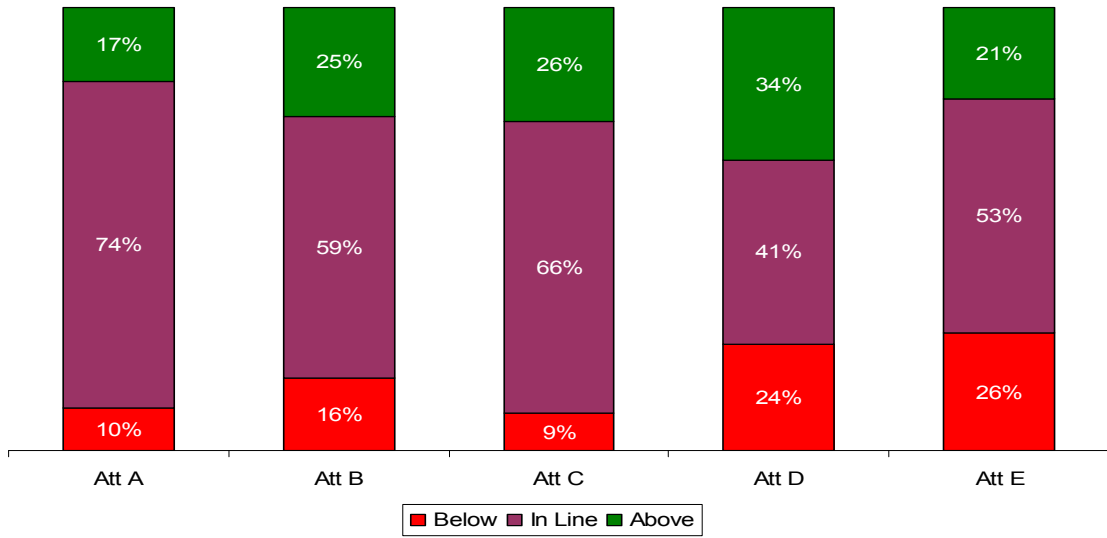
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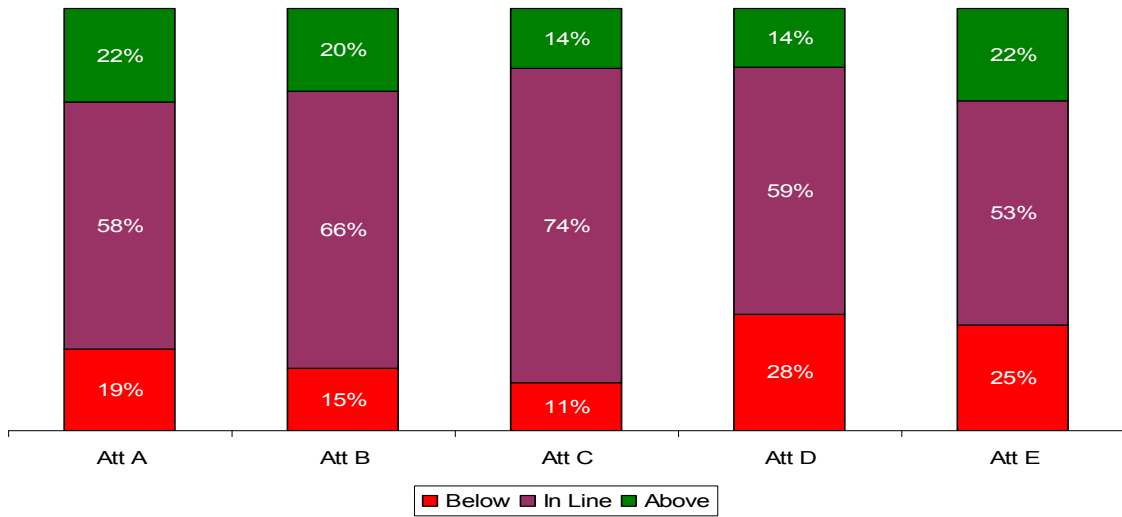
APPENDIX 11

Charts showing percentage of borderline pupils in each FFT Achievement Classification Group by Attendance Groups and Key Stage 2 Subject

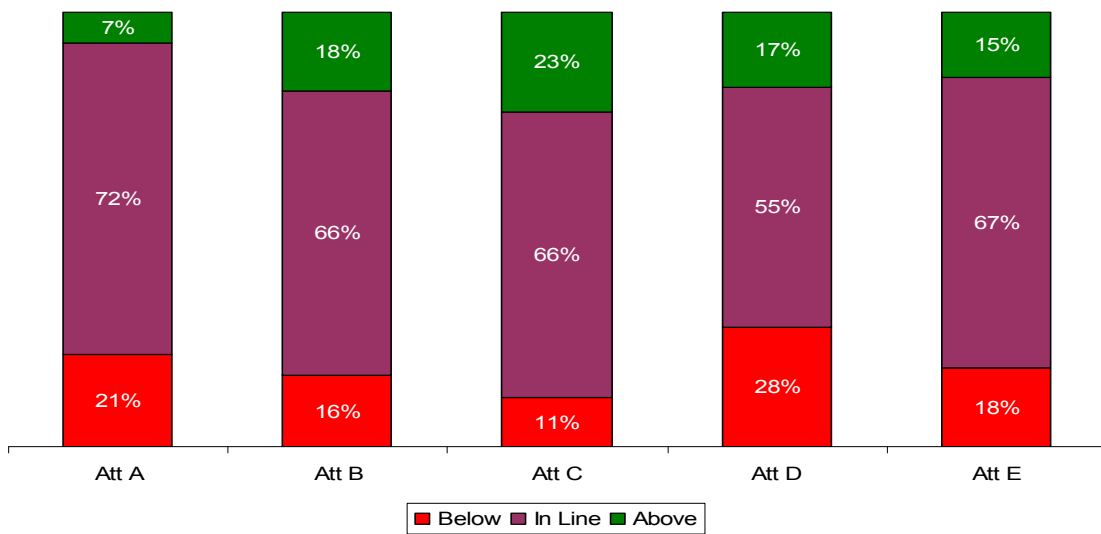
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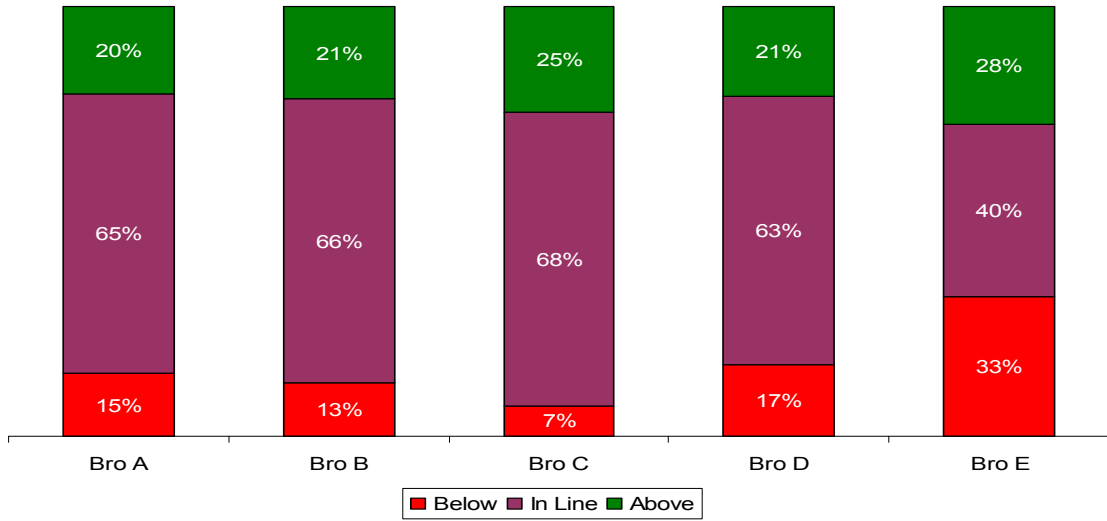
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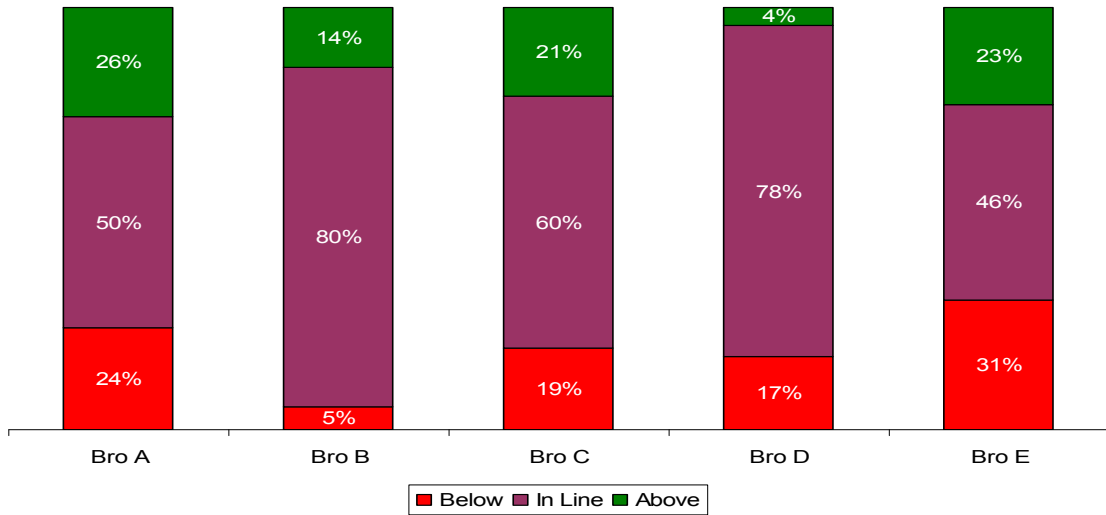
APPENDIX 12

Charts showing percentage of borderline pupils in each FFT Achievement Classification Group by Broken Weeks Groups and Key Stage 2 Subject

English



Maths



Science

