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## *Development in Writing at the End of Key Stage 2*

## Final Report to the ESRC

### 1. Background

The writing of primary school children in England has recently been the focus of national concerns (e.g. Beard, 2000, 2005; HMI, 2000; Ofsted, 2005). The concerns are focused on 'under-attainment' in writing, reflected in the national performance of eleven-year olds in comparison with their attainment in reading. Such concerns raise questions about what comprises development in writing and how it is measured. Furthermore, this is an issue on which relatively little rigorous research has been done in the primary age-range. This lack of research was pointed out during a 2003-4 ESRC-funded international seminar series, one of whose objectives was 'to identify aspects of pupil writing that are in need of further investigation'. In a consideration of the evidence base during the first seminar, it was argued that more needed to be done to investigate what constitutes progression and to conceptualise what that progression looks like (See http://www.ioe.ac.uk/schools/ecpe/ReconceptualisingWriting5-16/seminars.html, Seminar 1 transcript, para. 49).

Various measures have been used in studies of primary/elementary children's writing development in recent years and these were detailed in the original Proposal. A number of related issues at secondary level have been investigated since the project began, at the University of Exeter (see http://www.people.ex.ac.uk/damyhill/writing.htm), particularly a 2003-5 ESRC Project on *The Linguistic and Compositional Characteristics of Secondary Children's Writing (Patterns and Processes).* This research has analysed the language features of samples of secondary children's writing in order to describe qualitative differences according to ability, gender or age (see also Myhill, 2005).

The project being reported here makes an original contribution to the field by using a repeat design and standardised tasks which allow developments in specific features of writing to be rigorously investigated over a specific time-scale. The measures also address features that characterise specific genres as well as the more general linguistic features of writing that have been used in previous work.

### 2. Objectives

The aim of the research was to characterise the development of narrative and persuasive writing in a sample of primary school children. The objectives were as follows:

1. To profile the features of writing that typify Year 5 and Year 6 writing
2. To identify the features that present particular difficulty
3. To compare the writing of boys and girls
4. To compare the profile of Year 6 writing with the criteria for National Curriculum Level 4 or above (the 'expected' national test performance).

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The aim and objectives remained unchanged through the course of the research. Objectives 1-3 above were addressed using the methods outlined in the original Proposal and were successfully achieved.

Objective 4 provided more challenge. While the broad criteria of National Curriculum Level 4 for Writing are found on http://www.qca.org.uk, the criteria are annually translated into national testing programmes by the independent body contracted for this work, currently the National Foundation for Educational Research (NFER), and the genres through which a number of strands of writing are assessed, on an unseen basis, may vary. While the tests used in this study were devised by the NFER, to assist teachers in assessing children's development within the National Curriculum, the genres that are used in the tests (imaginative narrative and persuasive description) are different from those in the national tests that the children in the study subsequently took: explanation and chronological report (DfES, 2004) . In order to pursue this objective, further work is planned in collaboration with the NFER (see **Impacts** section below).

## 3. Methods
### a. Sample
As described in the initial Proposal, the data-set for the study comprised 440 scripts completed by 112 children from the control group used in an evaluation of the *Further Literacy Support* (FLS) intervention programme, and its follow-up, funded by successive DfES grants. The group comprised all the Year 5 pupils (60 boys; 52 girls) from five schools representing a range of socio-economic catchments in two LEAs that were not included in the FLS evaluation.

The scripts comprised the NFER *Literacy Impact* Writing Test B, completed near the end of the children's second terms in Year 5 and Year 6. The test draws on content likely to appeal to both genders. The Marking Guide approximates to the Year 6 national test marking criteria at the time when the test was standardised and scaled. The reliability of *Literacy Impact* Writing Test B (Cronbach's Alpha) is reported as 0.87, considered to be suitably high for tests of this length and nature (Twist and Brill, 2000, pp. 63-65). Further details appear in the original Proposal.

### b. Design
The scripts had been previously rated by a panel of experienced Key Stage 2 national test markers, trained in standardisation meetings led by a technical representative of the publishers, NFER-Nelson. Each member of the marking panel was responsible for all the scripts from a specific number of schools. In *Literacy Impact*, the assessment of writing is based on a numeric scheme applied to five constituents of writing. The aggregate raw scores may then be converted to a scaled score which equates to a National Curriculum level.

In order to rate text-level features of narrative and persuasive description, dichotomous scales were derived from relevant sources (Wyatt-Smith, 1997; DfEE, 2000; DfES, 2002; QCA, 2003; Cameron and Besser, 2004) and

extensively trialled and refined. Items were also included on spelling and whether there was evidence of planning and self-correction.

Most of the data in the rating scales are dichotomous and examine whether a feature is present or not. The three raters also had extensive national test marking experience (See Annexes 1a and 1b.)

In order to rate more general linguistic features of technical accuracy and sentence grammar, rating scales for 100-word samples were derived from recent studies in the field, especially Cameron and Besser (2004), and also extensively trialled and refined. The two raters were doctoral students from a university linguistics department (See Annexes 1c and 1d.)

### c. Inter-rater reliability and scale refinement

To help improve inter-rater reliability during rater training, and to refine the scales, an approach was used similar to the one used by Cameron and Besser (2004). Moderation trials were carried out on sets of ten randomly selected scripts. After each trial, discrepancies were noted and discussed with each panel.

In the main rating exercise, Cronbach's Alpha for the 12 technical accuracy items for the narrative task was 0.49 (Year 5 data) and 0.56 (Year 6 data). Across the 41 text-level (dichotomous) items in the narrative task, the Kuder Richardson coefficient was 0.76 (Year 5 data) and 0.69 (Year 6 data). It was not felt appropriate to undertake this calculation for the persuasive task items, as many texts were shorter than the 100 word sample specified in the research design. To check on the inter-rater reliability for this task, each rater received the same three, randomly selected, scripts without knowing that these were being used for the inter-rater check. Reliability across raters was calculated for each feature within the main categories of the scale by dividing the number of agreements by the number of ratings. For the linguistic features of the persuasive task, the mean agreement across all categories was 0.66 and for the text-level features 0.86. For the sentence grammar items of the narrative task, the mean agreement was 0.60. Findings in relation to features with low levels of agreement are being reported with caution.

### d. Coding

Confidentiality of pupil names during rating and coding was maintained in the coding exercise by the removal of the cover sheets from photocopies of the *Literacy Impact* booklets and the addition of specially coded labels.

Entries for the quantitative data-set were coded as follows:

(i) the *Literacy Impact* raw scores for the five constituents of writing referred to above.

(ii) Dichotomous text-level entries for narrative texts (including seven spelling, planning and editing variables); dichotomous text-level entries for persuasive description texts (including seven spelling, planning and editing variables).

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(iii) Predominantly numerical entries for linguistic features (technical accuracy and sentence grammar) in narrative texts (also including total text length); predominantly numerical entries for linguistic features in persuasive description texts (also including total text length and number of incorrect spellings).

The Year 6 national test scores for the pupils were also collected from the five schools, following clearance from the DfES, and these were added to the data-set for cross-referencing purposes. The writing level was obtained for 99 pupils, the reading for 104 pupils and overall English for 105 pupils.

### e. Quantitative Analysis
i <u>*Literacy Impact* raw scores</u>

In order to obtain a general indication of Year 5-Year 6 changes, comparisons were made between the Y5 and Y6 *Literacy Impact* raw scores for the five constituents of writing and their aggregates. Gender differences between the Year 5 and Year 6 scripts were tested for, using the paired t-test.

Comparisons of the writing features in Level 4 or above, Level 3/4 and Level 3 or below attainment bands, as identified by the *Literacy Impact* scaled scores, were undertaken in the qualitative phase.

<u>ii The text-level ratings for narrative and persuasive description tasks</u>

The tasks completed in Year 5 and Year 6 respectively were analysed as follows:

percentages of pupils whose texts included the features included in the rating scales;

binomial analysis of the dichotomous text-level data to test for significant differences in proportion;

Chi squared analysis for each item in the rating scales to investigate the numbers of pupils whose writing included a feature in Year 5 but not in Year 6 and vice versa.

<u>iii Interval data from the linguistic features of texts</u>
Significant differences between the Year 5 and Year 6 scripts were tested for, using the paired t-test.

### f. Qualitative Analysis
Sub-samples of scripts from each attainment band and gender group were read by the researchers in order to triangulate the quantitative analyses and to describe and document holistic features of content, language use and overall effectiveness.

The sub-samples comprised the scripts from the pupils whose writing was, according to *Literacy Impact* scores,
rated highest in Year 6 (13);
showed the greatest gains between Year 5 and Year 6 (13);
rated lowest in Year 6 (12);
showed the greatest decreases in scores between Year 5 and Year 6 (14).

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Pro formas were constructed from the relevant literature, independently trialled by the Principal Award Holder and the Research Assistant with a sub-sample of scripts and then discussed and further refined (See Annexes 2a and 2b).

### g. User Participation

All five schools agreed to be involved in the project and a half-day briefing meeting was held with school representatives (Year 5 or Year 6 class teachers) just before the project began. The original teachers were contacted again at the end of the qualitative phase so that they could comment on the findings from their school and also on a summary of the results as a whole. All five teachers provided emailed responses and two also provided further comments by telephone.

## 4. Results
### Quantitative Analysis

i *Literacy Impact* raw scores
Both the mean and the median increased between Year 5 and Year 6, indicating that overall performance on these tests had improved.

Table 1 Summary statistics for Year 5 and Year 6 *Literacy Impact* tests

|  | Year 5 (n=111) | Year 6 (n=112) |
|---|---|---|
| Mean | 15.80 | 19.07 |
| Median | 14.00 | 19.00 |

Fig 1 shows that the majority of pupils showed an improvement from Year 5 to Year 6.

Fig 1 Distribution of score difference Year 6 - Year 5 (n=111)



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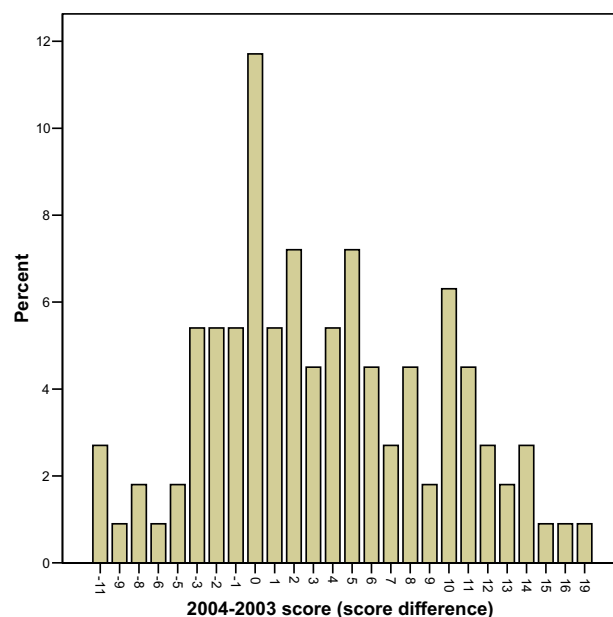
Of the 111 pupils in the sample that completed the tests in both years, 27 (24.3%) achieved a lower score in the second year, 13 (11.7%) showed no change, and 71 (64.0%) showed an improvement in their score. Table 2 shows that there was an improvement in all categories and Table 3 shows where girls scored significantly higher. Boys did not score significantly higher in any category.

Table 2 Mean score in each category for Year 5 and Year 6 (n=111 for Year 5 and 112 for Year 6)

| Category | Mean score for Year 5 | Mean score for Year 6 |
|---|---|---|
| Purpose and Organisation in Persuasion (out of 6) | 3.54 | 4.21 |
| Purpose and Organisation in Narrative (out of 9) | 4.66 | 5.54 |
| Grammar, Vocabulary and Style (out of 6) | 3.28 | 3.87 |
| Punctuation (out of 3) | 1.26 | 1.94 |
| Spelling (out of 3) | 1.71 | 1.96 |
| Handwriting (out of 3) | 1.35 | 1.57 |

Table 3 Gender Comparisons for *Literacy Impact* tests

| Girls achieved significantly higher in | |
|---|---|
| Year 5 | Year 6 |
| the test as a whole | the test as a whole |
| purpose and organisation in narrative | purpose and organisation in both genres |
| | grammar, vocabulary and style |
| punctuation | punctuation |
| handwriting | |

## ii The text-level ratings for narrative and persuasive description tasks

Text-level features in narrative texts: pupil sample as a whole
The following comments address the positive differences that were found to be significant from the use of the binomial analysis. The full range of results is listed in Annex 3.

*Attention to the specified story prompt*
When the children were in Year 5, 70.3% of the scripts were rated as accurate in attending to the specified story prompt; in Year 6, this had increased to 87.3% of the sample ($p > 0.001$).

*Ability to write in style appropriate to audience and purpose*
Table 4 in Annex 4 indicates that there was also an increase in the percentage of all the other items (2-8). Two features showed most increase: awareness of reader (+12.4%, $p < 0.05$) and clear evidence of purpose (attempts to engage reader) (+16.9%, $p < 0.01$). A significant increase was also found in key events portrayed from Alex's point of view (+8%, $p = 0.05$).

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*Ability to select and sequence information in the format of a story*
As can be seen in Table 5 in Annex 4, the two features that increased most were the use of dialogue as a strategy used to elaborate on the resolution of the narrative (+18.4%, $p < 0.01$) and the amount of narrative structure related to the main event (+16.7%, $p < 0.05$). Other significant increases were found in the use of action to develop character (+11.5%, $p = 0.05$) and the use of action to develop the main event (+14.1%, $p < 0.05$).

*Ability to construct paragraphs*
As can be seen in Table 6 in Annex 4, when in Year 6, children were more likely to demonstrate the use of well-organised paragraphs (+22.2%, $p = 0.001$). The children were also more likely to use more paragraphs in Year 6, as shown in Table 7 in Annex 4.

*Ability to link narrative*
Table 8 in Annex 4 indicates that the feature that increased most within this section was the ability to use connectives to inject suspense into the narrative (+11%, $p < 0.05$).

*Ability to choose words that enhance the writing*
As indicated in Table 9 in Annex 4, there was a notable increase in the use of exclamations for impact in the Year 6 scripts (+19.5%, $p < 0.01$). Significant increases were found in use of adventurous vocabulary to add interest to the writing (+15.1%, $p < 0.05$) and verbs used to emphasise action, thoughts or feelings (+17.7%, $p < 0.01$). The three features that increased most were the use of exclamations for impact (+19.5%, $p < 0.005$), the use of verbs to emphasise action, thoughts or feelings (+17.7%, $p < 0.01$) and the use of adventurous vocabulary to add interest to the writing (+14.9%, $p < 0.05$).

*Ability to plan and self-correct*
There was very limited evidence of planning. This might be due to the actual test design that does not include an explicit planning stage, unlike more recent national test writing assessments.

Chi squared analysis was used for each item in the rating scales to investigate the numbers of pupils whose writing included a feature in one year but not the other. The analysis revealed an 'ebb and flow' profile, with substantial proportions of children including some features in Year 5 but not in Year 6 and vice versa (see Annex 5).

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## Text-level features in narrative texts: changes by gender

Positive differences that were found to be significant from the use of the binomial analysis within gender groups are shown in Table 10 below.

Table 10 Changes in text-level features in narrative texts by gender

| Significant gains by boys | Significant gains by girls |
|---|---|
| attention to specified story prompt ($p < 0.01$) | the use of description as a strategy to elaborate on the main event ($p < 0.05$) |
| clear evidence of purpose (attempts to engage reader) ($p < 0.05$) | well-organised paragraphs ($p < 0.05$) |
| the use of description as a strategy to elaborate on the main event ($p < 0.05$) | the use of description as a strategy to elaborate on character ($p < 0.05$) |
| the use of dialogue as a strategy to elaborate on the resolution ($p = 0.01$) | the use of exclamations for impact ($p < 0.05$) |
| a coherent ending in plot resolution ($p < 0.05$) | |
| well-organised paragraphs ($p < 0.05$) | |
| connectives used to inject suspense ($p < 0.05$) | |
| use of adventurous vocabulary to add interest to the writing ($p < 0.05$) | |
| the use of verbs to emphasise action, thoughts or feelings ($p < 0.01$) | |

## Text-level features in persuasive texts: pupil sample as a whole
In Year 5, 80% of the scripts were rated as accurate in 'Attention to task'; in Year 6, this had increased to 90.1%, $p < 0.05$).

*Ability to write in a style appropriate to audience and purpose*
Table 11 in Annex 4 indicates that there was also an increase in the percentage of all the other items under this heading, with the exception of writing with a consistent focus on persuasion.  Two features show most increase: advertisement form maintained (+12.1%, $p = 0.05$) and use of bold type and/or capital letters to add emphasis (+11.6%, $p < 0.05$).

*Ability to select and sequence information in the format of persuasive writing*
Table 12 in Annex 4 indicates that there was an increase in the percentage of all the items in this section, apart from the item regarding the inclusion of the name of the product. Four features increased significantly more than the others. These were the development of persuasive points (+17.6%, $p < 0.01$), the inclusion of a series of persuasive points (+13.9%, $p < 0.05$), snappy summary of the information given (+12.4%, $p < 0.05$), and the use of precise information (+11.3%, $p < 0.05$).  Other increases of note were description of the dessert's features (+6.4%, $p < 0.05$) and memorable ('take home') message (+12.2%, $p < 0.069$ NS).

*Ability to construct paragraphs, use a variety of sentences and link ideas*
Table 13 in Annex 4 indicates that there were increases in the presence of all features in the Year 6 assessment, although none were significant.

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*Ability to choose words which enhance the writing*
Table 14 in Annex 4 indicates that there was an increase in the percentage of all the items in this section apart from the use of exaggeration, which decreased slightly. The feature to record the most increase is the use of verb phrases (+13.2%, $p = 0.05$). Notable increases were also observed for the use of word play (+10.5%, NS) and the use of noun phrases (+9.2%, $p < 0.05$).

*Ability to plan and self-correct*
There was very limited evidence of planning although there was evidence from most children of some editing, proof reading and self-correction, and this had increased by Year 6.

Chi squared analysis was used for each item in the rating scales to investigate the numbers of pupils whose writing included a feature in one year but not the other. The analysis again revealed an 'ebb and flow' profile, with substantial proportions of children including some features in Year 5 but not in Year 6 and vice versa (see Annex 5).

Text-level features in persuasive texts: changes by gender

Positive differences that were found to be significant from the use of the binomial analysis within gender groups are shown in Table 15 below.

Table 15 Changes in text-level features in persuasive texts by gender

| Boys showed significant gains in | Girls showed significant gains in |
|---|---|
| description of the dessert's features ($p < 0.05$) | attention to task purpose ($p < 0.05$) |
| | conversational relationship with audience (style / tone) ($p < 0.053$) |
| | inclusion of a series of persuasive points ($p < 0.05$) |
| | development of persuasive points ( $p < 0.01$) |
| | use of noun phrases ($p < 0.05$) |
| | use of verb phrases ($p < 0.05$) |

Other gains that were close to significance are shown in Annex 6.

iii interval data from the linguistic features of narrative texts:

Technical accuracy and sentence grammar: pupil sample as a whole

The texts were longer                                               ($p < 0.01$).
There were more missing commas                          ($p < 0.01$).
There were fewer inverted commas in the wrong place     ($p < 0.05$).
There were fewer spelling errors                          ($p < 0.05$).
There were more noun-pronoun errors                       ($p < 0.05$).
There were more non-finite clauses used for subordination ($p < 0.05$).

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Differences between another 18 features approached significance and could conceivably reach significance in a replicated study with a larger sample (see Annex 7).

The significant results corroborate findings on total text length (word count) in previous studies. The increase in the number of missing commas and noun-pronoun errors could conceivably reflect increases in text length and structure not being combined with the necessary re-reading in a time-controlled task. Tables 16 and 17 show the changes by gender.

Tables 16 and 17 Technical accuracy and sentence grammar: changes by gender

| Boys | | Girls | |
|---|---|---|---|
| Year 5 | Year 6 | Year 5 | **Year 6** |
| boys' texts had significantly more inverted commas in the wrong places | significantly more full stops missing | were significantly longer | |
| more missing prepositions | more noun-pronoun errors | significantly more full stops to close speech in the wrong places | |
| more errors in non-finite subordination | more plural form errors | | |
| | more missing prepositions | | |
| | more relative clauses in the subject slot | | |
| | more errors in relative clauses in the adverbial slot | | |

Year 5 - Year 6 Comparisons

| Boys | Girls |
|---|---|
| Significantly longer texts | Same length in Year 5 as in Year 6 |
| Significant reduction in the number of missing commas | Fewer incorrect spellings |
| Significantly fewer inverted commas in the wrong places | Fewer relative clauses in the subject slot |
| More noun-pronoun errors | |
| More plural form errors | |
| More non-finite subordination | |
| More errors in non-finite subordination | |
| Fewer errors in relative clauses in the subject slot | |
| More errors in relative clauses in the adverbial slot | |
| More single nouns in the Subject Noun Phrase. | |

It should be noted, however, that the majority of the above means were low (less than one).

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## *Qualitative Analysis*

The main findings from the qualitative analysis are set out in Tables 18-23 below.

Table 18 Imaginative Narrative: What characterised high attainment?

| | |
|---|---|
| **Overall effectiveness of imaginative narrative** | Consistent narrative structure<br>Frequent use of dialogue<br>Series of paragraphs |
| **Content** | Attention to the specified story prompt<br>Focus on Alex's [main character] anticipation and subsequent reaction to the free gift |
| **Language use** | Third person / past tense used consistently<br>Dialogue in different tense<br>Stylistic choices employed to draw the reader into events<br>Appropriate and adventurous vocabulary to emphasise actions, thoughts and feelings |
| **Other** | Length often about 300 words<br>Handwriting joined and usually fluent<br>Punctuation reasonably secure |

Table 19 Imaginative Narrative: What characterised consistently low attainment?

| | |
|---|---|
| **Overall effectiveness of imaginative narrative** | Limited information about setting and characters<br>Little attempt to organise the narrative into paragraphs<br>No / limited use of dialogue<br>Incomplete / rather abrupt ending |
| **Content** . | Attention to specified story prompt |
| **Language use** | Third person / past tense used consistently<br>Only time-related connectives |
| **Other** | Length often below 200 words<br>Handwriting a mixture of print and joined<br>Punctuation often missing / limited in use |

Table 20 Imaginative Narrative: What characterised high gains?

| | |
|---|---|
| **Overall effectiveness of imaginative narrative** | More features of narrative structure (e.g. initial setting with sequence of events in chronological order)<br>Greater use of paragraphing<br>More direct speech<br>More developed interaction between characters |
| **Content** | Improved attention to specified story prompt<br>Greater focus on Alex's reaction to the gift |
| **Language use** | Third person / past tense used more consistently<br>Dialogue in different tense<br>Greater use of connectives<br>Vocabulary used more to emphasise action, thoughts or feelings |
| **Other** | Increase in word length<br>Improved handwriting - mostly joined and fluent<br>Improved and increased use of punctuation |

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Table 21 Imaginative Narrative: What characterised writing in which scores decreased?

| **Overall effectiveness of imaginative narrative** | Reduced use of dialogue |
|---|---|
| | |
| **Content** | Less focus on Alex's reaction to the gift |
| | |
| **Language use** | Fewer examples of vocabulary used to emphasise action, thoughts or feelings |
| | |
| **Other** | Reduction in word length<br>More missing punctuation |

Table 22 Persuasive Description: What characterised high attainment?

| Overall effectiveness of persuasive description | Clear organisational structure<br>Consistent persuasive appeal<br>Direct appeal to the reader<br>Lively, animated and confident style<br>Frequent use of underlining, capitals, brackets and exclamations for effect |
|---|---|
| | |
| Content | Description of ingredients and consumer appeal<br>Key information on ingredients, features, consumer appeal and availability |
| | |
| Language use | Frequent use of descriptive vocabulary<br>Adventurous choice of adjectives and verbs<br>Frequent use of word play<br>Advertisement-style language - including some use of hyperbole<br>Vocabulary chosen for strong persuasive effect<br>Use of complex sentences |
| | |
| Other | Longer than average texts |

Table 23 Persuasive Description: What characterised consistently low attainment?

| Overall effectiveness of persuasive description | Limited use of the organisational features of persuasive genre<br>Style not particularly persuasive<br>Less likely to include direct appeal<br>Writing repetitive in places<br>Less likely to use underlining, capitals, brackets and exclamations for effect |
|---|---|
| | |
| Content | Emphasis on dessert's ingredients<br>Some key information omitted<br>Less likely to include some information on value for money or customer satisfaction |
| | |
| Language use | Limited use of descriptive vocabulary<br>Limited evidence of expanded description |
| | |
| Other | Low mean length - 67 words<br>Handwriting often a mixture of print and joined; or only print<br>Capital letters and full stops not always used; other forms of punctuation often missing or incorrectly used |

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Table 24 Persuasive Description: What characterised high gains?

| Overall effectiveness of persuasive description | Increased organisational structure and sense of audience<br>More consistent persuasive style<br>More convincing direct appeal to reader<br>Increased use of underlining, capitals, brackets and exclamations for effect |
|---|---|
| Content | More detailed description of ingredients, integrated with consistent persuasive appeal<br>Increase in amount of key information (ingredients, features, consumer appeal, availability) |
| Language use | Vocabulary more appropriately chosen to add interest and for persuasive effect<br>Expanded descriptive detail and adjectives used for strong persuasive appeal<br>Advertisement type language - including some use of hyperbole<br>More complex sentence constructions |
| Other | Increased word length |

Table 25 Persuasive Description: What characterised writing in which scores decreased?

| Overall effectiveness of persuasive description | Less use of concluding appeal<br>Less direct appeal to the reader<br>Persuasive appeal not always so consistent<br>Less use of underlining, capitals, brackets and exclamations for effect |
|---|---|
| Content | More a description of the dessert<br>Relatively more focus more on ingredients |
| Language use | Reduction in use of expanded description<br>Reduction in use of word play |
| Other | Reduction in word length |

Performance was generally consistent with subsequent national test scores and schools were able to provide additional information on individual performances which will be used in subsequent publications.

**5. Activities**
Refereed presentations have been made in line with the original Proposal:
BAAL/IRAAL Conference at the University of Cork, September 2006 (See *Society Today* entry);
EARLI-Writing SIG, University of Antwerp, September 2006;
BERA, University of London, September 2007;
National Reading Conference, Los Angeles, November 2006.

Proposals have also been refereed and accepted for:
National Reading Conference, Austin, November 2007;
*Writing Research Across Borders* Conference, Santa Barbara, February 2008.

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## 6. Outputs

Further proposal are being prepared for the following international conferences: EARLI-Writing SIG, Lund, June 2008; EARLI-Assessment SIG, Potsdam, August 2008.

Several papers are being prepared for submission to appropriate international journals.

The study will also be discussed in the forthcoming international *Handbook of Writing Development* (Sage) of which the PAH is lead editor.

Articles are being submitted to the *Primary English Magazine* and other professional outlets.

Requests for details of the Final Report have come from academics in Australia (Beverly Derewianka) and New Zealand (Libby Limbrick).

## 7. Impacts

A summary of the findings has been discussed with Dr Marian Sainsbury, Head of Literacy Assessment Research at the National Foundation for Educational Research (NFER) and Dr Liz Twist, Principal Research Officer at the NFER and co-author of the *Literacy Impact* test. These colleagues have subsequently secured the agreement of the QCA to provide the PAH with the NFER analysis of the 2004 KS2 Writing National Writing Tests. This will provide opportunities for further investigation of developmental features across the respective data-sets, particularly the issue of the influences of genre variation in the strands of writing that are currently the focus of NC assessments.

Links and common issues with the Exeter project *The Linguistic and Compositional Characteristics of Secondary Children's Writing (Patterns and Processes)* will be explored in publications based on the project being reported here.

## 8. Future Research Priorities

This study is, to the best of our knowledge, the first to have used a repeat design and standardised tasks that allow developments in specific constituents of primary school children's writing to be investigated over a specific time-scale. While there were some developments in features of sentence grammar and technical accuracy, a more consistent and positive range of results were found in the text-level ratings. These results indicate the empirical gains that are possible when established applied linguistics concepts are used to inform new kinds of analysis. The study also had a number of limitations, particularly in its relatively small sample and in the arbitrary nature of the tasks. Teaching was not studied, although schools reported that it was in line with the National Literacy Strategy.

The data-set will be further interrogated when additional papers are prepared for publication. The study has also suggested several lines for future writing research:

- which features of writing characterise development in genres other than narrative and persuasive description;
- which features in the 'ebb and flow' profiles (see pp. 21, 23 and Annex 5) secure the basis for subsequent, 'incremental' development in different genres;
- the extent to which boys' under-attainment in writing varies with genre;
- which practices are most effective in fostering writing development in different genres.

The study has indicated how little is known about some aspects of writing development and the complexities of investigating it; these issues raise important challenges to educators and policy makers when addressing national programmes of curriculum and assessment.

## References

Beard, R. (2000) *Developing Writing 3-13*. London: Hodder and Stoughton.

Beard, R. (2005) Teaching Writing: Using Research to Inform Practice, in Rijlaarsdam, G., Van den Bergh, H. & Couzijn, M. (eds.) *Research in Effective Learning and Teaching of Writing*, Amsterdam: Kluwer.

Cameron, L. and Besser, S. (2004) *Writing in English as an Additional Language at Key Stage 2* (Research Report No 586). London: Department for Education and Skills.

Department for Education and Employment (2000) *Grammar for Writing.* London: Department for Education and Employment.

Department for Education and Skills (2002) *National Literacy Strategy: Further Literacy Support Programme*. London: Department for Education and Skills.

Department for Education and Skills/Qualification and Curriculum Authority (2004) Key Stage 2 *English tests: Mark schemes*, London: Department for Education and Employment.

Her Majesty's Inspectorate (2000) *The Teaching of Writing in Primary Schools:Could Do Better.* London: Department for Education and Skills.

Myhill, D.A. (2005) The Impact of Prior Knowledge on the Socio-Cultural (Re)production of Written Genres, in Kostouli, T. (ed) *Writing in context: Research perspectives and pedagogical applications.* Amsterdam: Kluwer.

Office for Standards in Education (2005) *English in Primary Schools*. London: Office for Standards in Education.

Qualifications and Curriculum Authority (2003) *English tests: Mark schemes.*London: Department for Education and Employment.

Twist, L. and Brill, F. (2000) *Literacy Impact.* Slough: National Foundation for Educational Research.

Wyatt-Smith C. (1997) Teaching and Assessing Writing: An Australian perspective. *English in Education* 31 (3): 8-22.

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## *Development in Writing at the End of Key Stage 2*

### Annex 1a
### Rating Sheet for Long Task (Educational Raters)

**Educational rater:**                                        **Script #:**

**1. Analysis of writer's ability to construct a narrative**

Ability to write in a style appropriate to audience and purpose

|  | Accurate | Problems |
|---|---|---|
| Attention to specified story prompt [1] |  |  |

| *Style is appropriate to audience and purpose* | Yes | No |
|---|---|---|
| Narrative form is maintained [2] |  |  |
| Awareness of reader [3] |  |  |
| Clear evidence of purpose (attempts to engage reader) [4] (e.g. could include humour, irony) |  |  |
| Third person used consistently [5] |  |  |
| Past tense used consistently [6] |  |  |

| *Viewpoint* | Yes | No |
|---|---|---|
| Key events portrayed from Alex's point of view [7] |  |  |
| Viewpoint well controlled [8] (i.e. the narrator comments, e.g., about a character / event) |  |  |

Ability to select and sequence information in the format of a story

| *Amount of narrative structure* | None or minimal | Developed |
|---|---|---|
| Setting [9] |  |  |
| Character [10] |  |  |
| Main event [11] (i.e. Alex opening the box) |  |  |
| Resolution [12] |  |  |

| | Action | | Dialogue | | Description | |
|---|---|---|---|---|---|---|
| *Strategies used to elaborate narrative* | Yes | No | Yes | No | Yes | No |
| Setting [13 - 15] (1 or more examples) |  |  |  |  |  |  |
| Character [16 - 18] (1 or more examples) |  |  |  |  |  |  |
| Main event [19 - 21] (1 or more examples) (i.e. Alex opening the box) |  |  |  |  |  |  |
| Resolution [22 - 24] (1 or more examples) |  |  |  |  |  |  |

| *Plot resolution* | Yes | No |
|---|---|---|
| Is there a coherent ending? [25] |  |  |
| Concluding comment linked to resolution [26] |  |  |

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Ability to construct paragraphs

| *Ideas organised into paragraphs* | Yes | No |
|---|---|---|
| Well organised paragraphs [27] | | |
| Opening paragraph establishes narrative purpose [28] | | |

| *Nature of paragraphing* | none | many short | 2-3 | 4-5 |
|---|---|---|---|---|
| How many paragraphs does the writer use? [29] | | | | |

Ability to link the narrative

| *Use of connectives* | Yes | No |
|---|---|---|
| Connectives that signal time (2 or more examples) [30] (e.g. first thing, later that day, early that morning) | | |
| Connectives used to shift attention (1 or more examples) [31] (e.g. meanwhile, at that very moment) | | |
| Connectives used to inject suspense (1 or more examples) [32] (e.g. suddenly, without warning) | | |

Ability to choose words which enhance the writing

| *Stylistic choices focus on narrative appeal* | Yes | No |
|---|---|---|
| Exclamations used for impact [33] (e.g. capitalisation, sentence form) | | |
| Questions used to draw the reader into events [34] (e.g. Where should they look now?) | | |
| Dialogue in different tenses [35] | | |
| Some use of repetitive structures [36] (e.g. Alex ran, the boy ran, but …) | | |
| Was information withheld to build suspense? [37] | | |

| *Vocabulary chosen for narrative impact on reader* | Yes | No |
|---|---|---|
| Use of adventurous vocabulary adds interest to the writing [38] (2 or more examples) | | |
| Verbs used to emphasise action, thoughts or feelings [39] | | |

Ability to control the mechanical skills of writing

*Spelling errors (correct spelling in brackets)*

| Error 1 | Error 2 | Error 3 | Error 4 |
|---|---|---|---|
| | | | |

(Please indicate if you are unable to identify four spelling errors in the script    )

*Nature of spelling errors*

| Random | Invented | Weaker plausible | Stronger plausible |
|---|---|---|---|
| [40] | [41] | [42] | [43] |

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Ability to do process writing

| *Evidence of planning and editing* | Yes | No |
|---|---|---|
| Planning [44] | | |
| Self correction / Editing / Proof-reading [45]<br><br>(2 or more examples of self correction) | | |

Other - please mention anything else you may have noticed

[46]

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*Development in Writing at the End of Key Stage 2*

**Annex 1b**
**Rating Sheet for Short Task (Educational Raters)**

**Educational rater:**        **Script #:**

**2. Analysis of writer's ability to construct text for persuasive purpose**

Ability to write in a style appropriate to audience and purpose

|  | Accurate | Problems |
|---|---|---|
| Attention to task purpose [1] |  |  |

| *Style appropriate to audience and purpose* | Yes | No |
|---|---|---|
| Advertisement form is maintained [2] |  |  |
| Addresses reader [3] |  |  |
| Clear evidence of purpose (attempts to convince reader) [4] |  |  |
| Consistent focus on persuasion [5] |  |  |
| Simple present tense [6] |  |  |
| Use of bold type and/or CAPITAL letters to add emphasis [7] |  |  |

| *Viewpoint* | Yes | No |
|---|---|---|
| Clear and consistent viewpoint established [8] |  |  |
| Conversational relationship with audience (style / tone) [9] |  |  |
| Content included to impress audience [10] |  |  |
| Speaker's knowledge is established / authoritative voice [11] |  |  |

Ability to select and sequence information in the format of persuasive writing

Stage 1: Attracting Attention

| *Opening sentence / phrase* | Yes | No |
|---|---|---|
| Opens with a sentence or phrase that aims to capture the audience's attention ('hook') [12] |  |  |

| *Nature of 'hook'* | Yes | No |
|---|---|---|
| A little drama [13] |  |  |
| A story [14] |  |  |
| A problem in need of a solution [15] |  |  |

Stage 2: The Information

| *Key information about the product* | Yes | No |
|---|---|---|
| Is the information precise? [16] |  |  |
| Is the information given relevant? [17] |  |  |

| *Overview of product with appropriate supporting detail* | Yes | No |
|---|---|---|
| Name of product [18] |  |  |
| Description of dessert's features [19] |  |  |
| Nominated audience (Who is the product for?) customers, children, adults, ice cream lovers [20] |  |  |
| Availability of product (Where can you get it?) [21] |  |  |

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| | | |
|---|---|---|
| Explanation of its appeal to the audience (What does it do for you?) (Why should you buy it?) [22] | | |
| A series of persuasive points [23] | | |
| Development of above points by adding more detail [24] | | |

Stage 3: The Slogan

| | Yes | No |
|---|---|---|
| Memorable ('take home') message [25] | | |
| Concluding appeal to the reader [26] | | |
| Snappy summary of the information given [27] | | |

Stage 4: The Small Print (optional)

| | Yes | No |
|---|---|---|
| Inclusion of small print [28] | | |

Ability to construct paragraphs

| *Use paragraphs to organise ideas* | Yes | No |
|---|---|---|
| Well organised paragraphs [29] | | |
| Opening paragraph establishes persuasive purpose [30] | | |

Ability to use a variety of sentences

| *Use of sentences* | Yes | No |
|---|---|---|
| Effective use is made of a variety of sentence types [31] | | |
| Uses a mixture of long and short sentences for effect [32] | | |

Ability to link ideas

| *Linking of ideas* | Yes | No |
|---|---|---|
| Coherent / ordered linking of ideas [33] | | |
| Mainly logical connectives [34] | | |

Ability to choose words which enhance the writing

| *Stylistic choices focus on persuasive appeal* | Yes | No |
|---|---|---|
| Snappy slogan [35] | | |
| Exaggeration [36] | | |
| Intriguing question - to catch reader's attention [37] | | |
| Adjectives / adverbs for emphasising [38] | | |
| Wordplay (linguistic patterning, alliteration, figurative language) [39] | | |
| Tempting description of the benefits of the product [40] | | |

| *Vocabulary chosen for persuasive effect* | Yes | No |
|---|---|---|
| Noun phrases [41] | | |
| Adverbials [42] | | |
| Verb phrases [43] | | |

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Ability to control the mechanical skills of writing

*Spelling errors (correct spelling in brackets)*

| Error 1 | Error 2 | Error 3 | Error 4 |
|---------|---------|---------|---------|
|         |         |         |         |

*Nature of spelling errors*

| Random | Invented | Weaker plausible | Stronger plausible |
|--------|----------|------------------|--------------------|
| [44]   | [45]     | [46]             | [47]               |

Ability to do process writing

| *Evidence of planning and editing* | Yes | No |
|-----------------------------------|-----|-----|
| Planning [48] | | |
| Editing / Proof-reading / Self correction [49] | | |

Other - please mention anything else you may have noticed

[50]

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*Development in Writing at the End of Key Stage 2*

**Annex 1c**
**Rating Sheet for Long Task (Linguistics Raters)**

**Linguistics rater:**                                                  **Script #:**

**Technical accuracy**
*Punctuation*

| | | |
|---|---|---|
| Commas (100 word section) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Commas, used to mark direct speech (100 word section) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Full stops/ other marks used to close direct speech (100 word) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Full stops (100 word section) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Inverted commas (100 word section) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Other punctuation problems (list here and note number of errors) (100 words) | *Total other errors:* | |

*Spelling*

| | | |
|---|---|---|
| Incorrect spelling (100 word section) *List any instances of errors relating to cultural influences:* | *Number of incorrect spellings:* | |

**Grammatical errors**
*Agreements*

| | | |
|---|---|---|
| Subject- verb (100 word section) | *Number of errors:* | |
| Noun-pronoun (100 word section) | | |
| Plural forms (100 word section) | | |

*Verb forms*

| | | |
|---|---|---|
| Incorrect verb form (100 word section) | *Number of errors:* | |

*Articles*

| | | |
|---|---|---|
| Article usage (100 word section) | *Number used incorrectly or in wrong places:* | |
| | *Number missing:* | |

*Prepositions*

| | | |
|---|---|---|
| Preposition usage (100 word section) | *Number used in wrong places:* | |
| | *Number missing:* | |

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*Formulaic phraseology*

| | | |
|---|---|---|
| Errors in formulaic phrases/ non-native-like phraseology (100 words) | *No. of instances* | |
| *List any instances:* | | |
| *List any instances you may have spotted outside the 100 words:* | | |

**Sentence grammar**
*Types of clauses used*

| | | |
|---|---|---|
| Main clauses (100 word section) | *Number of each type:* | |
| Subordinate clauses (100 word section) | | |

| *Types of subordination used* | Correct Usage | Attempted/Syntax Error |
|---|---|---|
| N-f (Non-finite) | | |
| Rs (Relative clause in Subject slot) | | |
| Ro (Relative clause in Object slot) | | |
| Ra (Relative clause in Adverbial slot) | | |
| A (Adverbial clause) | | |
| Ns (Nominal clause in Subject slot) | | |
| No (Nominal clause in Object/Complement slot) | | |

*Direct Speech*

| | | |
|---|---|---|
| Direct speech (100 word section) | *Total  Number of instances:* | |
| | *Instances of DS that were not marked with inverted commas:* | |
| | *Total number of words of DS:* | |

| | | |
|---|---|---|
| Reporting direct speech, e.g., "He said" (M+DS) (100 wd)) | *Total  Number of instances:* | |
| | *Total number of words of M+DS:* | |

*Phrase structure*

| | | |
|---|---|---|
| Subject noun phrases (100 word section) | *Number used that are single pronouns:* | |
| | *Number that are single nouns:* | |
| | *Number used that are longer than one word:* | |

| | | |
|---|---|---|
| Verb phrases (100 word section) | *Number of verb phrases :* | |
| | *Total number of words in this slot:* | |

| | | |
|---|---|---|
| Object  noun phrases/Complements (100 word section) | *Number of phrases:* | |
| | *Total number of words in this slot:* | |

| | | |
|---|---|---|
| Phrases in Adverbial slot (100 word section) | *Number of phrases :* | |
| | *Total number of words in this slot:* | |

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*Subordinators*

| (100 word section)                                          | *Number of subordinators used :* | |
|-------------------------------------------------------------|----------------------------------|--|
| *List the subordinators here, indicating the number of each:* | | |

*Modals*  (can, may, will, should, would, could, might, must, used to, shall, ought to)

| (100 word section- not counting DS)                  | *Number  of modals used :* | |
|------------------------------------------------------|----------------------------|--|
| *List the modals here, indicating the number of each:* | | |

**Text length**
*Total text length*

| Word count | *Total number of words:* | |
|------------|--------------------------|--|

**Other- please mention anything else you may have noticed**

(For example, use of adjectives, handwriting (legibility, joining and fluency))

## *Development in Writing at the End of Key Stage 2*

## Annex 1d
## Rating Sheet for Short Task (Linguistics Raters)

**Linguistics rater:**                                                              **Script #:**

**Technical accuracy**
*Punctuation*

| | | |
|---|---|---|
| Commas (100 word section) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Commas, used to mark direct speech (100 word section) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Full stops/ other marks used to close direct speech   (100 word) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Full stops (100 word section) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Inverted commas (100 word section) | *Number used in wrong places:* | |
| | *Number missing:* | |

| | | |
|---|---|---|
| Other punctuation problems (list here and note number of errors) (100 words) | *Total other errors:* | |

*Spelling*

| | | |
|---|---|---|
| Incorrect spelling (100 word section) *List any instances of errors relating to cultural influences:* | *Number of incorrect spellings:* | |

**Text length**
*Total text length*

| | | |
|---|---|---|
| Word count | *Total number of words:* | |

**Other- please mention anything else you may have noticed**

(For example, use of adjectives, handwriting (legibility, joining and fluency))

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*Development in Writing at the End of Key Stage 2*

**Annex 2a**
**Pro Forma for Narrative Qualitative Analysis**

| Name: | | Rater: | |
|---|---|---|---|
| **'Breakfast Surprise' (Imaginative narrative)** | | | |
| | **Year 5** | | **Year 6** |
| | **Score ( ): L_** | | **Score ( ): L_** |
| **Qualitative features** | | | |
| **Overall effectiveness of imaginative narrative**<br>Incl. selection and sequencing of information in the format of a story (incl. setting; character; main event, resolution, through action, dialogue and description).<br><br>Consistent narrative form, attempts to engage reader. | | | |
| **Content**<br>Subject matter of imaginative narrative e.g. attention to specified story prompt; key events portrayed from Alex's point of view; supernatural character or incident; error in order or supply of gift; disappointing gift; gift comprising pet or journey. | | | |
| **Language use**<br>Third person/past tense used consistently.<br><br>Narrative linked through the use of connectives that signal time, shift attention or inject suspense.<br><br>Words chosen to enhance the writing through (i) stylistic choices (exclamations used for impact; questions used to draw the reader into events; dialogue in different tense; use of repetitive structures; information withheld to build suspense); (ii) adventurous vocabulary to add interest to the writing or verbs to emphasise action, thoughts or feelings. | | | |
| **Other**<br>Incl. length, spelling, handwriting and punctuation. | | | |

*Development in Writing at the End of Key Stage 2*

**Annex 2b**
**Pro Forma for Persuasive Description Qualitative Analysis**

| Name: | | Rater: | |
|---|---|---|---|
| 'The Toffee Tower' (persuasive description) | | | |
| | **Year 5** | | **Year 6** |
| | Score ( ): L_ | | Score ( ): L_ |
| **Qualitative features** | | | |
| **Overall effectiveness of persuasive description** Incl. logical, non-chronological structure (introduction, description and concluding appeal). Awareness of audience needs. Consistent persuasive style. Use of underlining, capitals, brackets, exclamations etc. for effect. | | | |
| **Content** Subject matter of persuasive description e.g. key information points, ingredients, health, value for money, human instincts and drives, life-changing experiences, customer satisfaction. | | | |
| **Language use** Incl. precise and/or adventurous vocabulary; expanded description via variety of nouns and verbs, pre-modification of nouns, adverbials, directive verb forms, imagery, alliteration and other word play, hyperbole, variety of sentence constructions, rhetorical questions, cohesive ties. | | | |
| **Other** Incl. length, spelling, handwriting and punctuation. | | | |

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## *Development in Writing at the End of Key Stage 2*

### Annex 3
### Narrative Task Binomial Analysis

| Item | Name | Year 5 - Year 6 | Notes |
|------|------|-----------------|-------|
| *1-6* | *Ability to write in a style appropriate to audience and purpose* | | |
| 1 | Attention to specified story prompt | -3.01<br>0.003 | |
| 2 | Narrative form is maintained | -1.04<br>0.289 | |
| 3 | Awareness of reader | -2.21<br>0.027 | |
| 4 | Clear evidence of purpose (attempts to engage reader) | -2.69<br>0.007 | |
| 5 | Third person used consistently | -1.50<br>0.133 | |
| 6 | Past tense used consistently | -1.77<br>0.077 | |
| *7-8* | *Viewpoint* | | |
| 7 | Key events portrayed from Alex's point of view | -1.96<br>0.050 | |
| 8 | Viewpoint well controlled | -0.49<br>0.624 | |
| *9-26* | *Ability to select and sequence information in the format of a story* | | |
| *9-12* | *Amount of narrative structure* | | |
| 9 | Setting | -1.98<br>0.047 | |
| | Item 10 (Character):<br>Item 11 (Main event):<br>Item 12 (Resolution): | -1.58/0.114<br>-2.50/0.012<br>-1.41/0.159 | "developed" was used as the comparative proportion |
| *13-24* | *Strategies used to elaborate narrative* | | |
| 13 | Setting / Action | -1.31<br>0.190 | |
| 14 | Dialogue | 0.17<br>0.865 | |
| 15 | Setting / Description): | 0.42<br>0.682 | |
| 16 | Character / Action | -1.96<br>0.050 | |
| 17 | Character / Dialogue | -0.90<br>0.368 | |
| 18 | Description | -0.97<br>0.332 | |
| 19 | Main event / Action | -2.10<br>0.036 | |
| | Dialogue | -1.26<br>0.208 | |
| 21 | Main event / Description | -1.28<br>0.201 | |
| 22 | Resolution / Action | | |
| 22 | Resolution / Action | -0.182<br>0.069 | |
| 23 | Resolution / Dialogue | -2.90<br>0.004 | |
| 24 | Resolution / Description): | -0.75<br>0.453 | |
| *25-26* | *Plot resolution* | | |
| 25 | Coherent Ending | -0.81<br>0.418 | |
| 26 | Concluding comment linked to resolution | -0.21<br>0.834 | |
| *27-29* | *Ability to construct paragraphs* | | |
| *27-28* | *Ideas organised into paragraphs* | | |
| 27 | Well organised paragraphs | -3.30<br>0.001 | |
| | *Narrative purpose* | -1.63 | |

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| | | | |
|---|---|---|---|
| | | 0.103 | |
| *29* | *Nature of paragraphing* | | |
| 29 | How many paragraphs does the writer use? | N/A | |
| ***30-32*** | ***Ability to link the narrative*** | | |
| *30-32* | *Use of connectives* | | |
| 30 | Connectives that signal time | -0.87 0.384 | |
| | Shift attention | 0 | |
| 32 | Connectives used to inject suspense | -2.38 0.017 | |
| ***33-39*** | ***Ability to choose words which enhance the writing*** | | |
| *33-37* | *Stylistic choices focus on narrative appeal* | | |
| 33 | Exclamations used for impact | -2.89 0.004 | |
| 34 | Questions used to draw the reader into events | -0.76 0.447 | |
| | Diff Tenses | -1.14 0.254 | |
| | Repetitive | 0.83 0.407 | |
| | Withheld Info | -0.62 0.535 | |
| *38-39* | *Vocabulary chosen for narrative impact on reader* | | |
| 38 | Use of adventurous vocabulary adds interest to the writing | -2.23 0.026 | |
| 39 | Verbs used to emphasise action, thoughts or feelings | -1.63 0.009 | |
| ***44-45*** | ***Ability to do process writing*** | | |
| | *Evidence of planning* | -1.75 0.080 | |
| 45 | Editing / Proof-reading / Self correction | -0.33 0.741 | |

Note:
The binomial statistic is a comparison of proportion between Y5 and Y6; the metrics given are the z scores and p values.

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## *Development in Writing at the End of Key Stage 2*

**Annex 4**
**Tables 4-14**

Table 4. Ability to write in style appropriate to audience and purpose (% of scripts)

| | Item | Present in Year 5 | Present in Year 6 |
|---|---|---|---|
| Style is appropriate to audience and purpose | Narrative form is maintained (2) | 86.5 | 90.9 |
| | Awareness of reader (3) | 71.2 | 83.6 |
| | Clear evidence of purpose (attempts to engage reader) (4) | 59.5 | 76.4 |
| | Third person used consistently 5) | 82.0 | 89.1 |
| | Past tense used consistently (6) | 82.9 | 90.9 |
| Viewpoint | Key events portrayed from Alex's [principal character] point of view (7) | 85.6 | 93.6 |
| | Viewpoint well controlled (8) | 58.6 | 61.8 |

Table 5. Ability to select and sequence information in the format of a story (% of scripts)

| | Item | | Present/developed in Year 5 | Present/developed in Year 6 |
|---|---|---|---|---|
| Amount of narrative structure | Setting (9) | | 22.5 | 34.5 |
| | Character (10) | | 65.8 | 75.5 |
| | Main event (11) | | 36.0 | 52.7 |
| | Resolution (12) | | 45.9 | 55.5 |
| Strategies used to elaborate narrative | Setting (13-15) | Action | 31.5 | 40.0 |
| | | Dialogue | 14.4 | 13.6 |
| | | Description | 27.0 | 24.5 |
| | Character (16-18) | Action | 68.5 | 80.0 |
| | | Dialogue | 55.0 | 60.9 |
| | | Description | 65.8 | 71.8 |
| | Main event (19-21) | Action | 46.8 | 60.9 |
| | | Dialogue | 22.5 | 30.0 |
| | | Description | 43.2 | 51.8 |
| | Resolution (22-24) | Action | 45.0 | 57.3 |
| | | Dialogue | 24.3 | 42.7 |
| | | Description | 50.5 | 55.5 |
| Plot resolution | Is there a coherent ending? (25) | | 64.0 | 69.1 |
| | Concluding comment linked to resolution (26) | | 53.2 | 54.5 |

Table 6. Ability to construct paragraphs (% of scripts)

|  | Item | Present in Year 5 | Present in Year 6 |
|---|---|---|---|
| Ideas organised into paragraphs | Well organised paragraphs (27) | 40.5 | 62.7 |
|  | Opening paragraph establishes narrative purpose (28) | 80.2 | 88.2 |

Table 7. Ability to construct paragraphs (% of scripts)

|  | Item | Year | None | Many short | 2-3 | 4-5 |
|---|---|---|---|---|---|---|
| Nature of paragraphing | How many paragraphs does the writer use? (29) | Year 5 | 48.6 | 11.7 | 23.4 | 16.2 |
|  |  | Year 6 | 27.3 | 25.5 | 20.9 | 26.4 |

Table 8. Ability to link the narrative (% of scripts)

|  | Item | Present in Year 5 | Present in Year 6 |
|---|---|---|---|
| Use of connectives | Connectives that signal time (2 or more examples) (30) | 41.4 | 47.3 |
|  | Connectives used to shift attention (1 or more examples) (31) | 6.3 | 6.4 |
|  | Connectives used to inject suspense (1 or more examples) (32) | 8.1 | 19.1 |

Table 9. Ability to choose words that enhance the writing (% of scripts)

|  | Item | Present in Year 5 | Present in Year 6 |
|---|---|---|---|
| Stylistic choices focus on narrative appeal | Exclamations used for impact (33) | 40.5 | 60.0 |
|  | Questions used to draw the reader into events (34) | 14.4 | 18.2 |
|  | Dialogue in different tenses (35) | 40.5 | 48.6 |
|  | Some use of repetitive structures (36) | 20.7 | 16.4 |
|  | Was information withheld to build suspense (37) | 31.5 | 35.5 |
| Vocabulary chosen for narrative impact on reader | Use of adventurous vocabulary adds interest to the writing (38) | 36.9 | 51.8 |
|  | Verbs used to emphasise action, thoughts or feelings (39) | 45.0 | 62.7 |

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Table 11. Ability to write in a style appropriate to audience and purpose (% of scripts)

|  | Item | Present in Year 5 | Present in Year 6 |
|---|---|---|---|
| Style appropriate to audience and purpose | Advertisement form is maintained (2) | 63.6 | 75.7 |
|  | Addresses reader (3) | 80.0 | 82.9 |
|  | Clear evidence of purpose (attempts to convince reader) (4) | 80.9 | 85.6 |
|  | Consistent focus on persuasion (5) | 81.8 | 80.2 |
|  | Simple present tense (6) | 97.3 | 100.0 |
|  | Use of bold type and/or CAPITAL letters to add emphasis (7) | 14.5 | 26.1 |
| Viewpoint | Clear and consistent viewpoint established (8) | 86.4 | 91.0 |
|  | Conversational relationship with audience (style/tone) (9) | 74.5 | 77.5 |
|  | Content included to impress audience (10) | 80.0 | 81.1 |
|  | Speaker's knowledge is established/authoritative voice (11) | 86.4 | 87.4 |

Table 12. Ability to select and sequence information in the format of persuasive writing (% of scripts)

|  | Item |  | Present in Year 5 | Present in Year 6 |
|---|---|---|---|---|
| Attracting attention | Opening sentence/phrase (12) |  | 75.5 | 77.5 |
|  | Nature of 'hook' | A little drama (13) | 30.0 | 33.3 |
|  |  | A story (14) | 34.5 | 40.5 |
|  |  | A problem in need of a solution (15) | 2.7 | 3.6 |
| The Information | Key information about the product | Is the information precise? (16) | 75.2 | 86.5 |
|  |  | Is the information given relevant? (17) | 80.7 | 86.5 |
|  | Overview of product with appropriate supporting detail | Name of product (18) | 92.7 | 90.1 |
|  |  | Description of dessert's features (19) | 91.8 | 98.2 |
|  |  | Nominated audience (20) | 29.1 | 33.3 |
|  |  | Availability of product (21) | 43.6 | 47.7 |
|  |  | Explanation of its appeal to the audience (22) | 57.3 | 64.0 |
|  |  | A series of persuasive points (23) | 57.3 | 71.2 |
|  |  | Development of above points by adding more detail (24) | 51.8 | 69.4 |
| The slogan | Memorable ('take home') message (25) |  | 50.0 | 62.2 |
|  | Concluding appeal to the reader (26) |  | 61.8 | 67.6 |
|  | Snappy summary of the information given (27) |  | 20.9 | 33.3 |
| The Small print | Inclusion of the small print (28) |  | 5.5 | 8.1 |

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Table 13. Ability to construct paragraphs, use a variety of sentences and link ideas (% of scripts)

|  | Item | Present in Year 5 | Present in Year 6 |
| --- | --- | --- | --- |
| Ability to construct paragraphs | Well organised paragraphs (29) | 33.6 | 37.8 |
|  | Opening paragraph establishes persuasive purpose (30) | 70.0 | 70.3 |
| Ability to use a variety of sentences | Effective use is made of a variety of sentence types (31) | 36.4 | 47.7 |
|  | Uses a mixture of long and short sentences for effect (32) | 25.5 | 34.2 |
| Ability to link ideas | Coherent/ordered linking of ideas (33) | 65.5 | 74.8 |
|  | Mainly logical connectives (34) | 50.9 | 56.8 |

Table 14. Ability to choose words which enhance the writing (% of scripts)

|  | Item | Present in Year 5 | Present in Year 6 |
| --- | --- | --- | --- |
| Stylistic choices focus on persuasive appeal | Snappy slogan (35) | 30.0 | 36.0 |
|  | Exaggeration (36) | 59.1 | 58.6 |
|  | Intriguing question – to catch reader's attention (37) | 15.5 | 22.5 |
|  | Adjectives/adverbs for emphasising (38) | 85.5 | 91.9 |
|  | Wordplay (linguistic patterning, alliteration, figurative language) (39) | 28.2 | 38.7 |
|  | Tempting description of the benefits of the product (40) | 39.1 | 40.5 |
| Vocabulary chosen for persuasive effect | Noun phrases (41) | 81.8 | 91.0 |
|  | Adverbials (42) | 49.1 | 56.8 |
|  | Verb phrases (43) | 39.1 | 52.3 |

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## *Development in Writing at the End of Key Stage 2*

### Annex 5a
### Text-level features in narrative texts: additional Chi squared analysis

Chi squared analysis was used for each item in the rating scales to investigate the numbers of pupils whose writing included a feature in one year but not the other. The analysis revealed an 'ebb and flow' profile, with substantial proportions of children including some features in Year 5 but not in Year 6 and vice versa.

The analysis revealed a moderate initial level of use, and also a significant increase, in the use of the following features, but also a substantial proportion of pupils whose writing included the feature in Year 5 but not in Year 6:
*Developed main event*
*Elaboration of character through action*
*Elaboration of main event through action*
*Exclamations used for impact*
*Use of adventurous vocabulary*

There was a low initial level of use, and also a significant increase, in the use of the following, but also a substantial proportion of pupils whose writing included the feature in Year 5 but not in Year 6:
*Connectives to inject suspense*
*Elaboration of resolution through dialogue.*

The analysis indicated that, in Year 5, 28 features of narrative writing were used more by girls than by boys. Of these, eight were used significantly more by girls:
*Narrative form is maintained*
*Developed character*
*Developed main event*
*Elaboration of main event through description*
*Coherent ending*
*Concluding comment linked to resolution*
*Information withheld to build suspense*
*Verbs used to emphasise action, thoughts or feelings.*

In Year 6, 24 features of narrative writing were used more by girls than by boys. Of these, four were used significantly more by girls than by boys:
*Developed character*
*Developed main event*
*Elaboration of setting through action*
*Elaboration of main event through dialogue.*

Girls maintained the gap between themselves and boys in the use of four features; overtook boys in the use of three features and opened up gaps between themselves and boys in the use of four features.

In Year 5, 11 features of narrative writing were used more by boys than by girls. Of these, one feature was used significantly more by boys:

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*Elaboration of setting through action.*

In Year 6, 13 features of narrative writing were used more by boys than by girls. Of these, no feature was used significantly more by boys,

Overall, boys closed the gap between themselves and girls in the use of nine features; overtook girls in the use of seven features and opened up a gap between themselves and girls in the use of one feature.

**Annex 5b**
**Text-level features in persuasive texts: additional Chi squared analysis**

Chi squared analysis revealed a moderate or high initial level of use, and also a significant increase, in the use of the following features, but also a substantial proportion of pupils whose writing included the feature in Year 5 but not in Year 6
*Attention to task purpose*
*Advertisement form is maintained*
*Effective use of a variety of sentence types*
*Vocabulary chosen for persuasive purpose: Verb phrases*
*A memorable 'take home' message*

There was a low initial level of use, and a significant increase, in the use of the following, but also a substantial proportion of pupils whose writing included the feature in Year 5 but not in Year 6:
*Snappy summary of the information given*
*Wordplay, linguistic patterning, alliteration, figurative language.*

The analysis also indicated that, in Year 5, 24 features of persuasive description were used more by girls than by boys. Of these, three were used significantly more by girls:
*Memorable ('take home') message*
*Well organised paragraphs*
*Effective use is made of a variety of sentence types*

In Year 6, 37 features of persuasive description were used more by girls than by boys. Of these, four were used significantly more by girls:
*Well organised paragraphs*
*Effective use is made of a variety of sentence types*
*Uses a mixture of long and short sentences for effect*
*Coherent / ordered linking of ideas.*

Girls maintained the gap between themselves and boys in 16 features; overtook boys in the use of 15 features and opened up gaps between themselves and boys in the use of five features.

In Year 5, 20 features of persuasive description were used more by boys than by girls. Of these, none were used significantly more by boys.

In Year 6, three features of persuasive description were used more by boys than by girls. Of these, none were used significantly more by boys.

Overall, boys closed the gap between themselves and girls in the use of one feature; overtook girls in the use of two features; and opened up gaps between themselves and girls in the use of one feature.

Further investigation is needed into which features, within the 'ebb and flow' profile, seem to secure the basis for subsequent, 'incremental' development in different genres.

## *Development in Writing at the End of Key Stage 2*

### Annex 6
### Changes in text-level features in persuasive texts by gender

| Gains close to significance in boys | Gains in close to significance in girls |
|---|---|
| use of bold type and/or capital letters to add emphasis (p < 0.09) | advertisement form maintained (p < 0.07) |
| memorable ('take home') message (p < 0.07) | content included to impress audience (p < 0.08) |
| adjectives / adverbs for emphasis (p < 0.07) | snappy summary of the information given (p < 0.09 |
|  | Uses a mixture of long and short sentences for effect (p < 0.08) |

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**Annex 7**
**Sentence grammar and technical accuracy differences approaching significance**

Differences between another 18 features approached significance and could conceivably reach significance in a replicated study with a larger sample:

There were more commas in the wrong place.
There were more other punctuation problems (noted by raters on respective scripts).
There were more instances of direct speech.
There were more words in direct speech.
There were more instances of reporting direct speech.
There were more nouns in Subject noun phrases.
There were more Subject noun phrases longer than one word.
There were more words in Verb phrases.

There were fewer commas missing in direct speech.
There were fewer full stops missing to close direct speech.
There were fewer prepositions in the wrong place.
There were fewer relative clauses in the Object slot.
There were fewer adverbial clauses.
There were fewer pronouns in Subject noun phrases.
There were fewer words in the Object slot.
There were fewer words in the Adverbial slot.
There were fewer subordinators.
There were fewer modals.