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Analysis of children's writing: some international comparisons

Comparisons of writing by 8 and 10-year-olds in Australia, England,
Singapore and USA

England

1999

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Publications related

The frameworks for analyses used in this project are similar to those used in the QCA project on Technical Accuracy in Writing by 16-year-olds in England and Wales. This project is reported in the following publications:

Improving Writing at Key Stages 3 and 4, which includes some implications for teaching (available from our publications order line, 01787 884444).

Technical Accuracy in Writing in GCSE English: research findings (available through the English team at QCA).

Technical Accuracy in Writing in GCSE English: methodology (available through the English team at QCA).

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Introduction

This report records the findings of a small scale study which arose originally from continued concerns about standards of literacy in England and possible greater proficiency in other countries. The study set out to investigate different aspects of children's writing in a number of countries where English is the language of instruction. It was essentially a preliminary study to determine whether there appeared to be any patterns of achievement in writing from country to country, which might merit further investigation.

The findings reported here are necessarily tentative, given the limited scale of the study, but readers may find them of interest, not least in considering to what extent they reflect their own experiences of children's writing in these age groups. The report may also suggest some ways of reviewing patterns of writing in individual schools, for example across year groups or classes, between years or from year to year.

The sample

The study included the writing of ten children from two age groups (8-year-olds and 10-year-olds) in each of four countries, (Australia, England, Singapore, and the United States of America). Each child undertook two tasks, yielding a total sample of 160 scripts. Teachers were asked to choose pupils whom they considered more or less typical for their school: 'not excellent at English, nor children who struggle', and ideally a balance of girls and boys.

Tasks

Pupils were required to do two unprepared tasks, spending no more than 45 minutes on each task. Teachers were asked to explain to pupils that they were helping with a study of writing, not taking a test. After teachers had explained the instructions, the pupils were to work independently, without using dictionaries.

Task 1 was to write a narrative titled 'The Rescue', using imaginative writing and making their story interesting and exciting.

Task 2 was non-narrative writing, where pupils were asked to write 1-2 pages of information about their school, as part of an international project, so that someone from another country could understand what it was like. They were asked to bear in mind their audience, to make their information accurate, to write in complete sentences and to choose any format they thought appropriate. The teacher's notes provided by QCA included some suggestions for topics that pupils might want to include.

The great majority of pupils were able to undertake the tasks, though a small number, mainly of 8-year-olds, wrote very short pieces, thus limiting the analysis which was possible. In a small number of cases similarities between pieces suggested some teachers might have disregarded the instructions not to prepare pupils for the tasks.

The analysis

All the examples of writing were analysed using coding frames developed by the English team at QCA. The frames provide a tool which enables specific aspects of writing to be analysed discretely, allowing quantifiable judgements to be recorded from which comparisons could then be made. The frames go some way to providing a systematic objective approach to evaluating children's writing, but they have limitations and subjective judgement is also used in some areas.

Despite the modest scope of the study design, and the limitations resulting from fewer countries and age groups than originally intended, there was nonetheless considerable analysis which could be done on the writing collected. The analyses were used to investigate overall patterns and distinctions between different writing tasks (narrative and non-narrative), different age groups and different countries. Gender differences have not been included because one country's samples included only boys in one age group and only girls in the other. With the important reservation of the small sample sizes, the study did allow for some comparisons and cross-references between each of these variables and some tentative pointers for any future investigations have emerged.

The structure of the report

Separate sections follow on each aspect covered by the coding frames:

- punctuation;
- sentence/clause and word class;
- spelling;
- paragraphing;
- textual organisation;
- non-standard features.

Within each section the analysis is presented under a set of standard headings. The report ends with some overall implications and recommendations for further investigations.

We do not suggest reading this report from start to finish. Some readers may be interested in only the brief summary (pages 6 and 7). Others may be interested in particular aspects of writing or in the differences in performance of 8 and 10-year-olds. Each section begins with a summary of the main features and these are the quickest way to gain an overview of the study. Following the main features are findings on the differences between narrative and non-narrative tasks and on the performances by children from different countries. The consistent format of each section aims to help readers find information easily.

Summary of findings and implications

Given the exploratory nature and limited size of the study the findings must remain tentative. However, it was possible to identify some overall patterns and some country-specific aspects for further exploration.

Common patterns

The study showed some common trends across countries, age groups and task, suggesting that these might be characteristic features of the developmental stages of young writers.

Language features

- most could handle sentence demarcation but internal sentence punctuation was less well mastered, and some punctuation marks were rarely used by these groups;
- spelling errors occurred in 3-4 words in every 100 and were most likely to be related to sound;
- writers used more adjectives than abstract nouns or adverbs, emphasising and elaborating people or things rather than actions;
- writers were in the process of developing paragraphing skills but these were generally incompletely grasped;
- writers appeared to have only limited ways of achieving textual cohesion; sequential paragraph linking devices predominated with few examples of other textual links;
- skills of textual organisation were more evident in openings than in endings;
- non-standard forms occurred infrequently and were more likely to occur in narrative writing and involve verb tenses and subject-verb agreement.

Narrative/non-narrative

For most aspects there were no major differences between narrative and non-narrative writing, however:

- at the level of sentence structure, narrative writing appeared to be simpler, with shorter sentences, more simple sentences and less subordination;
- in non-narrative writing few paragraphs contained a topic sentence; there was little evidence of writers presenting information in any other format than sentence based texts, and there were few lay-out devices besides paragraphs;
- there was a paucity of linking devices in non-narrative writing, including only a narrow range of conjuncts and adverbials, yet such links are key to achieving textual cohesion in non-narrative writing.

Progression

Progression between the 8 and 10-year-olds' writing was clearer for some aspects than others:

- the older children wrote longer sentences, used more subordination, made fewer tense errors and used fewer non-standard forms;
- sentence punctuation did not increase in accuracy with age, perhaps because of the greater complexity of sentence structure in the 10-year-olds' writing;
- spelling showed some increase in accuracy, less than might be expected – but the 10-year-olds used more sophisticated and ambitious vocabulary;
- 10-year-olds used more paragraphs and were more likely to structure their narrative writing in terms of paragraphs than 8-year-olds;
- 10-year-olds' writing showed clear progression in textual organisation in narrative but little or no progression in most aspects of non-narrative textual organisation.

Country-specific findings

The most striking differences were those between the Singaporean and the other three:

- the Singaporean sample had the highest scores for accuracy of punctuation (except speech punctuation) and spelling, appropriate use of paragraphs, use of paragraph links, and features of narrative textual organisation. They did much less well with non-narrative organisation;
- Australian scripts also scored well on paragraph links. Use of paragraphs in the USA sample was very low, whereas differences between their sample and the rest on other aspects were not so marked. These examples suggest that some features of writing were particularly associated with specific countries and may reflect different cultural or teaching emphases;
- the Singaporeans were likely to have learnt English as their second or subsequent language, which may explain why their writing showed more verb tense errors and non-standard features.

Implications

Reading the report may prompt teachers to consider questions such as:

- If the English scripts showed weakness in comparison with other countries in punctuation, what challenges does this offer to the teaching?
- How can more complex sentence structure be used effectively in narrative writing?
- What is expected progression in spelling between 8 and 10-year-olds?
- How can pupils in Key Stage 2 be taught text structure in non-narrative writing?
- How can pupils be alerted to the few non-standard forms they continue to use?

The report also suggests these areas would benefit from further investigation:

- the differences in sentence complexity in narrative and non-narrative writing;
- primary children's grasp of textual organisation in non-narrative writing;
- whether the Singaporean sample is typical and reasons for their superior performance.

Punctuation

Summary of main findings

At the level of sentence punctuation, these writers seem to have grasped the main concepts; on more than three quarters of the occasions when a full stop or capital letter was required punctuation was appropriate. Commas were not used so widely but in even the most difficult use of commas, to mark parenthesis, nearly two thirds of uses were correct.

Similarly, apostrophes - in *it's*, to mark omission and to mark possession - were used correctly in about two thirds of cases; where writing was incorrect in each of these uses the fault tended to be one of omission.

These writers did not seem to have mastered the use of speech layout though speech marks were both much more likely to have been used and to have been used correctly.

There is not a great deal of difference between the punctuation used in the narrative and non-narrative writing although capital letters and full stops were slightly more likely to have been used correctly in non-narrative writing. Commas were more likely to be used in non-narrative but levels of accuracy were broadly similar between the two tasks. The marked incidence of incorrect uses of *its/it's* in narrative writing compared to non-narrative suggested that perhaps writers were less conscious of this transcriptional feature when they were engaged with their stories.

The proportion of correct use of most punctuation features, apart from sentence punctuation, increased with age, although there were some features where the younger children outscored the others.

For most of these features, the Singaporean sample showed the highest level of accurate use; this applied to full stops, capital letters, commas, and omissive and possessive apostrophes. The Singaporean children did not do well on indicating direct speech through speech marks. English scripts showed the least correctness on six measures in terms of the proportion of correctly used features: full stops, capital letters, commas, its, omissive apostrophes, possessive apostrophes and speech layout.

Overall assessment

- 81% of full stops were used correctly, compared with 18% omitted and 1% used incorrectly.
- 86% of sentences began correctly with a capital letter.
- The use of internal sentence punctuation was much more sparse than the use of punctuation to demarcate sentences. There were just under 2,000 correctly used full stops and just over 2,000 capital letters whereas there were only 495 correctly used commas. Since there were only a total of 124 incorrect or omitted commas, overall this suggests that relatively simple sentence structures were used.
- The correct use of commas was most widespread in their function of separating items in a list, with the parenthetic use of commas and their use to demarcate clauses coming joint second.
- Writers seemed to have more difficulty with the parenthetic use of commas rather than either of the others (64% correct as opposed to just under 90% for the other two).

- The use of *its/it's* was relatively rare; there were only 24 instances in the sample, 17 of which correctly used the apostrophe and 7 of which did not.
- The apostrophe was used much more frequently to indicate omission rather than possession - 142 correct uses compared with 72.
- The omissive apostrophe was also more frequently used correctly than the possessive (74% to 63%). In both cases the apostrophe was more frequently omitted than used incorrectly.
- Direct speech was much more likely to be demarcated by speech marks than by speech layout (179 instances as against 75).
- Speech marks were used correctly in two thirds of cases with omissions being twice as frequent as incorrect usages. Speech layout was one of the most problematic areas for these writers with just over one third being correctly used; omissions amounted to nearly half of the total.
- Only one semi-colon was used in the sample; it occurred in the non-narrative writing of an American pupil and was used incorrectly. The colon was more frequently used, appearing correctly on eight occasions and omitted on eight.
- Parentheses and dashes were both quite rare. There were 10 instances of correct use of parentheses, six from the Australian 10-year-old non-narrative sample, two from the English 8-year-old narrative and two from the American 10-year-old sample, one narrative and one non-narrative. There were two incorrect uses of parentheses, both from the Australian 10-year-old non-narrative group. One dash only was correctly used – in non-narrative writing by a 10-year-old Singaporean, and one was omitted in the 10-year-old non-narrative American sample.

Tasks

- The correct use of full stops was more common in non-narrative than in narrative (86% correct as opposed to 77%). The same tendency was found, although to a lesser degree, in respect of capital letters used correctly (89% in non-narrative as against 83% for narrative).
- The incidence of comma splices was identical in both tasks.
- The mean number of full stops and capital letters used was higher in narrative than in non-narrative, suggesting that pupils were writing longer sentences in non-narrative.
- The use of commas varied with the task set. The overall incidence of correct use of commas for non-narrative was about half as great again as that for narrative.
- Within this overall picture for commas there were two items of interest: the use of commas to separate items on lists was eight times as great in the non-narrative samples as in the narrative; this probably reflected the frequency with which the title 'My School' led to the production of lists of curriculum subjects, names of teachers, available resources and so on.
- The use of commas in parentheses and to demarcate clauses, however, showed the reverse pattern, with narrative writing scoring higher on both these measures.
- There was little difference between the two tasks in terms of the proportion of correct use to incorrect or omitted commas; when commas were used to separate items in lists and to demarcate clauses the proportion correct was about 90% for each task. The parenthetical use seemed to be more difficult with figures of 61% correct for narrative and 70% for non-narrative.

- There was an interesting difference between the tasks in relation to correct use of the apostrophe in *its/it's*. There were nine correct usages in narrative and eight in non-narrative writing but there were no incorrect usages in non-narrative, whereas there were seven in the narrative pieces.
- The frequency of omissive apostrophes was about twice as great in narrative as in non-narrative writing, but the proportion of correct usages was almost identical. The position for possessive apostrophes was broadly similar with nearly twice as many being used in narrative writing, with a very similar proportion of correct uses.
- There were no instances of direct speech being used in the non-narrative scripts.
- The colon was used more frequently in non-narrative writing, with nine correct usages as opposed to two in narrative; there were also five omissions of colons in non-narrative.

Age groups

- Somewhat surprisingly, the proportion of correctly used full stops, of capital letters and comma splices was exactly the same at both ages.
- The use of commas increased with age, the 10-year-olds producing at least twice as many correctly used commas in each of the categories.
- The relationship between correct and incorrect/omitted commas was complex with regard to age. In separating items on a list, the 10-year-olds were much more likely to be correct (93% as against 76%); in demarcating clauses, both groups operate at the 90% level; however, when it came to parentheses, the 8-year-olds outscored the 10-year-olds (74% to 61%). This probably reflected the more complex structures being used by 10-year-olds which should have been (but were not always) demarcated.
- There was an increase in the use of *its/it's* with age (16 instances against 8) and also a slight increase in the ability to handle the associated apostrophe correctly – the 8-year-olds had five correct out of eight compared with 12 out of 16 for 10-year-olds.
- The omissive apostrophe was nearly three times as common at 10 years than at 8; the proportion of correctly used omissive apostrophes also increased with age (80% as against 62%). The number of correctly used possessive apostrophes was broadly the same at each age range but again the proportion of correct usages increased with age (72% compared with 56%).
- Speech marks were used four times as often by the 10-year-olds as by the younger group and there was a corresponding increase in correctness – 77% correct as opposed to 42%. Speech layout was employed more than twice as often by 10-year-olds as by 8-year-olds. The figures appeared to suggest that the younger children were more competent users of this feature than the older writers – 47% correct for 8-year-olds compared with 34% for 10-year-olds; however the latter figure was affected by the sample from England where one pupil had 23 omissions, which was a greater number than the omissions from each of the other countries' whole samples (maximum 14); a second pupil in the sample from England had 12 omissions and another 11. When the samples from Australia, Singapore and the USA only were considered, the proportion of correct responses for 10-year-olds rose to 55%.
- The younger children used colons correctly more frequently than the older (seven against two); the figure of seven included six from the Australian sample, suggesting that this had perhaps been a relatively recent teaching point in their classroom. The older children omitted seven colons compared with none for the other group.

Countries

- The proportion of full stops used correctly varied considerably in accordance with national origin: the lowest was the sample from England (71%) followed by the samples from Australia (80%) and the USA (84%); ahead of the others was the sample from Singapore (91%). The same rank ordering applied to the correct use of capital letters in the samples from England (77%), Australia (84%), the USA (89%) and Singapore (94%).
- The highest number of correctly used commas was produced by the Singaporean sample (168) followed by the samples from Australia (125), England (111) and the USA (91).
- The Singaporean sample also had the highest proportion of correctly used commas (92%), again followed by the samples from Australia (89%) then the USA (72%) and England (65%).
- The Singaporean and Australian samples had the highest incidence of correct use of commas in each of the three functional categories, with very similar scores for separating items on a list and demarcating clauses, although the Singaporean sample was 18 percentage points ahead on commas used as parentheses. The sample from England led the USA sample on separating items on a list and demarcating clauses but had a very low percentage (26%) of commas correctly used parenthetically.
- The use of the apostrophe with *it's* appeared at first sight to vary between children from different national samples; however there was no use of *it's* in the Singaporean sample and while the sample from England (with eight correct uses out of 13) seemed much worse than the Australian and USA samples (five out of six and four out of five, respectively), the discrepancy was largely accounted for by one writer who used three incorrect forms.
- The ranking by country was the same for both omissive and possessive apostrophes. The Singaporean sample fared best with 92% and 81% respectively; the Australian and the USA scripts form a group in the middle with percentages around 80 and 50 respectively. The English scripts came last, with only 53% of omissive and 47% of possessive apostrophes being correctly used.
- The sample from England provided by far the highest incidence of correct use of speech marks (88 instances of correct use) followed by the USA and Australian scripts with 42 and 38 correct uses respectively; the Singaporean sample trailed on the use of this feature with 11 correct uses. In terms of the proportion of correct to incorrect and omitted uses of speech marks, the USA sample comes first with 77% followed by scripts from England (65%) and Australia (63%) with the Singaporean sample scoring only 47%. It may well be that the low frequency of direct speech in the Singaporean scripts was related to uncertainty about its expression in English.
- As was to be expected given their low incidence of direct speech, the Singaporean scripts also showed less use of speech layout conventions than the other groups, there being only 11 instances of use, with eight of those correct, compared with the samples from Australia (25 out of 36 correct); England (20 out of 35 correct) and USA (22 out of 25 correct). There were no examples of omission of necessary speech layout in the Singaporean scripts, while the Australian sample had 11 omissions and the USA 14. As discussed under age groups above, the English scripts had a very high number of speech mark omissions (73 instances), 64% of which came from three scripts.
- The Australian sample used colons correctly far more than any other group, with a total of seven compared with one each for the USA and England and none from Singapore.

Sentence/clause and word class

The sentence/clause analysis sections of the coding frame enabled examination of the number of sentences, sentence length, the incidence of simple sentences and of co-ordination and subordination, and the sequence of verb tenses, thus enabling judgements and comparisons to be made about the levels of sentence complexity and sophistication attempted by the young writers and the degree of successful control they achieved. The word class analysis provided data from which to identify and compare patterns of use of abstract and concrete nouns, pronouns, adjectives and adverbs.

Summary of main findings

Narrative writing seemed, in various ways, to be simpler than non-narrative: sentences were shorter and there were more simple sentences; subordination was less frequent and the incidence of abstract nouns was also less.

There were also predictable differences between age groups: older children wrote longer sentences with fewer simple sentences, used subordination more frequently, had fewer errors in the sequence of tenses and used more adjectives and adverbs.

Overall assessment

- The mean number of sentences per 100-word sample was 9.4, with a mean of 5.6 simple sentences per sample, indicating that nearly half of the sentences were complex or compound.
- There were more co-ordinating clauses per sample than subordinating ones (5.2:3.8).
- The incidence of errors in sequencing of tenses was relatively low, with a mean of 0.58 occurrences per sample.
- Adjectives (885 instances) occurred more commonly than adverbs (694) or abstract nouns (307).

Tasks

- There was a higher number of sentences in narrative, with a mean of 9.9 per hundred words compared with a mean of 8.7 for non-narrative, suggesting that sentences were slightly shorter in narrative than in non-narrative. There was also a slight tendency for narrative to have a higher number of simple sentences than non-narrative (5.4 per hundred words as against 5.9).
- The proportion of co-ordination to subordination was much higher in narrative with a mean of 4.5 as against 2.0. In non-narrative the gap was much less although co-ordination again predominated (2.9:1.9).
- There was a higher frequency of adjectives and both abstract and concrete nouns in non-narrative writing but a higher incidence of pronouns and adverbs in narrative. The high frequency of adjectives in non-narrative (a mean of 7.6 per hundred words against 3.4 for narrative) probably reflected the essentially descriptive nature of the task. Abstract nouns were much less frequent in narrative writing with a mean of 0.79 as against 3.1 in non-narrative.

Age groups

- The younger group used more sentences per hundred words in both tasks, the overall means being 9.9 for the 8-year-olds and 8.9 for the 10-year-olds. The older group was also less likely to use simple sentences in both tasks, the overall mean per hundred words being 6.8 for the 8-year-olds and 4.5 for the older writers.
- An examination of co-ordination and subordination showed an age related difference: the groups had similar frequencies of co-ordination (3.3 instances per hundred words for 8-year-olds against 3.2 for 10-year-olds) but the older children used subordination more frequently – 2.8 times as compared with 1.9.
- Examination of errors in sequence of tenses would also suggest an age difference: there are 0.8 per hundred words for 8-year-olds as against 0.4 for 10-year-olds. The picture is, however, more complicated. The younger children have a very high incidence of error in the narrative task, which accounts for nearly two out of three errors. As described below, the majority of errors were concentrated in the Singaporean sample.
- Both age groups used more adjectives than abstract nouns or adverbs, with the older age group using more adjectives and adverbs than the younger (means of 6.2:4.9 and 4.8:3.9 respectively). There was one puzzling feature in this section, concerning the use of abstract nouns in non-narrative writing by the 8-year-olds. Their mean was 2.4 per 100 words compared with 0.35 for 8-year-old's narrative, 0.44 for 10-year-olds' narrative and 0.65 for 10-year-olds' non-narrative. Eight-year-olds' non-narrative yielded the highest score of abstract nouns for each country. Perhaps the tendency to list curriculum areas in describing their schools has boosted this figure.

Countries

- The number of sentences per 100 words varied slightly between the groups, with the Australian sample having the lowest mean (8.7) followed by those from England (9.1), USA (9.8) and Singapore (9.9). In terms of the incidence of simple sentences there is little difference between scripts from Singapore, England and Australia (5.3, 5.4 and 5.5 respectively) although there is a higher frequency among the American sample (6.5).
- Writers used more co-ordination than subordination in the samples from all the countries but England where the frequency was identical for both. The highest use of co-ordination was in the USA sample with a mean of 4.15 per hundred words; the lowest level was the England mean of 2.8. England, again with a mean of 2.8, was the highest user of subordination, with Australia using it least (1.8).
- There was a spread of errors in the sequence of tenses but the great majority were made by children from Singapore: for example, 37 out of 51 errors in 8-year-old narrative and ten out of eleven errors in 10-year-old non-narrative writing were made by these children. This was one of the few areas in which the children from Singapore showed real difficulties not shared to the same extent by the other pupils. The mean error score for the Singaporean sample was 1.6, compared with 0.27 from the USA sample, 0.25 (England) and 0.17 (Australia).
- The relative frequency of the parts of speech was the same in three of the four countries. The samples from Australia, England and Singapore included concrete nouns most frequently followed by pronouns then adjectives, adverbs and finally abstract nouns. The American scripts showed the same pattern except that adjectives and adverbs were in the opposite order.

Spelling

The coding frame for spelling was applied to a 100-word sample from each script from which were recorded the total number of words correctly spelt and the numbers of spelling errors, categorised under omissions, endings, sounds and 'other errors'. A rating was also given to each script on the basis of the 100-word sample, for the range and sophistication of the vocabulary used.

Summary of main findings

The analysis of Spelling showed errors occurred in three-four words in every 100. None of the variables examined seemed to have made any great difference to the ability of these writers to spell with a large degree of correctness. Although the overall differences in scores between countries were small, the higher spelling scores of the Singaporean 8-year-olds, (especially when considered in relation to the higher incidence of non-standard forms in the writing of these second language speakers) might be worth further investigation.

Overall assessment

- In general, the standard of spelling was consistent. Taking the sample as a whole, 97% of the words were correctly spelt with only one of the 16 subgroups falling below 95% (English 8-year-old narrative scripts: 93%).

Categories of Error

- Overall, the greatest number was recorded in relation to the category of sound-related errors (212 errors), with the 'other' category coming second (175 errors), followed by omission (95 errors) and endings, which showed a low incidence of only 27 errors. This order of frequency of error type was maintained in each set of scripts by age group and task.
- Four subdivisions of error appeared more frequently than others. These were: in the sound category, homophones (104 occurrences) and phonetically plausible (58); in the 'other' category, common words (80); in the omission category, single letters (65).

Tasks

- The number of correct spellings was remarkably constant across the two tasks, narrative producing 7,774 correctly spelt words and non-narrative 7,750.
- In general, the younger children were more accurate in non-narrative (using vocabulary of similar sophistication in both tasks); the older were more accurate in narrative even though this included more sophisticated vocabulary. The differences were, however, very slight.

Age groups

- In general, as would be expected, there was greater correctness in the older age group.
- The difference by age was perhaps less than might have been expected, the 8-year-olds producing 7,678 correctly spelt words and the 10-year-olds 7,816, a difference of less than 2%.
- The similarity between the two age groups appeared, at least in part, to be explicable in terms of the more sophisticated vocabulary used by the 10-year-olds. Their cumulative score for range and sophistication of vocabulary, based on a mark per script, of 1, 2 or 3 (3 = most sophisticated) was 126 compared with a figure of 95 for the younger writers. This did not, however, explain why the Singaporean 10-year-old non-narrative scripts were more poorly spelt than their 8-year-old counterparts, since the 10-year-olds were judged to have used less sophisticated vocabulary than the 8-year-olds. The small sample size affects this picture since it was attributable to the low scores (one of 91, the other of 93) of two pupils. The average of the other eight pupils in the sample was 99.

Countries

- Yet again, differences were relatively slight, the range from top to bottom being 2%. Nonetheless, it was striking that the children from Singapore spelt most correctly in both tasks and that their 8-year-old non-narrative scripts were more accurate than either set of scripts from the 10-year-olds of the other nationalities, except for the Australians in non-narrative.

Paragraphing

Slightly different coding frames were applied to the narrative and non-narrative writing, reflecting their different structural characteristics. In each case number and appropriateness of paragraphs used and the means of linking paragraphs together were analysed, along with any other layout devices used. For non-narrative writing the use of topic sentences was also analysed.

Summary of main findings

Paragraphing tended to improve with age in all countries. Ten-year-olds tended to be more aware of the need to paragraph their writing whether they were writing a story or a non-narrative piece and they were more likely to apply specific linking devices, especially in narrative writing, perhaps reflecting increased fluency in reading and awareness of narrative text.

There was consistently greater use of paragraphs by the Singaporean sample and low use in the American scripts across the age groups and tasks. The high incidence of appropriate or partly appropriate paragraph use by Singaporean 8-year-olds indicates that paragraphing is a skill which could be well developed by that age.

Although many more 8-year-olds used paragraphs in their non-narratives than narratives, both age groups were more likely to link paragraphs successfully in narrative writing, indicating they were familiar with some devices associated with sequencing a story. However these were mostly related to the sequencing of events in time, rather than other grammatical choices.

There was limited use of paragraph links in non-narrative writing. Where examples of linking features occurred, they tended to be associated with a particular country's sample, possibly reflecting different emphases in teaching.

The ability to employ conjuncts and adverbials to link paragraphs was not widespread, though the variation between countries, with most of the examples coming from Singaporean and Australian scripts, might suggest difference emphases in teaching these specific devices, and would be worth further investigation.

Overall assessment

- 23% of the whole sample of scripts were judged to show an appropriate use of paragraphs, with a further 30% showing a partly appropriate use. 26% of the overall sample did not use paragraphs.
- 12 scripts, 7.5 % of the sample, made some use of other layout devices.
- 26% of the sample linked paragraphs together by use of conjuncts or adverbials. Across the 160 scripts there were 105 instances of specific linking of paragraphs by these means.

Tasks

- Appropriate or partly appropriate use of paragraphs was slightly more apparent in non-narrative writing (58% of scripts) than in narrative (47%).
- 36% of non-narrative scripts made some use of topic sentences or statements to introduce paragraphs, but only six of the scripts overall were judged to have done this most of the time, with a further 23 scripts doing so part of the time.
- All the examples of other layout devices besides paragraphs (12 scripts in total) occurred in non-narrative writing and almost entirely in the scripts of 10-year-olds. They included letter layout, sub-headings, lists and in one case a sketch map. Four of the six scripts using sub-headings were from the same school, perhaps suggesting this device had been taught to these pupils.
- There was a striking difference between the tasks in the incidence of conjuncts or adverbials to link paragraphs. 33 out of 80 writers used these linking devices in their narrative writing, whereas only 15 out of 80 writers did so in their non-narrative. There was a total of 78 uses in the 80 narrative scripts, but only 28 uses in the same number of non-narrative scripts.
- Of these 78 uses in narrative, 75 were either conjuncts used for ordering or adverbials of time, reflecting how sequencing events tended to drive the children's narrative structures. In contrast there were only three uses of adverbials of place in these narrative scripts.
- In the non-narrative writing, adverbials of place were the most commonly occurring linking device, encouraged perhaps by the topic – my school. Instances of conjuncts used for contrast or re-focusing were rare, with only six examples overall, suggesting perhaps that the writers in the sample had limited strategies for structuring their non-narrative writing.

Age groups

- There was a marked increase in the incidence and effectiveness of paragraph use between the two age groups, only partly explained by the older children tending to write at greater length; 8-year-olds' scripts gave a total of 156 paragraphs, compared with the 10-year-olds' total of 254.
- About twice as many paragraphs (105) were written by the 8-year-olds in their non-narrative writing as in their narrative (51) where paragraph structure might be sacrificed to the momentum of the story. However, the 10-year-olds wrote around twice as many paragraphs in their narrative (173) as in their non-narrative writing (81).
- While 24 of the 40 non-narrative scripts by 8-year-olds showed some use of paragraphs, only 12 of the 40 narrative 8-year-olds' scripts did so. At age 10 the pattern was more even across the two tasks with 26 narrative scripts showing some use of paragraphs and 23 non-narrative, suggesting that by age 10, the young writers were more likely to be aware of the need for paragraphs in both types of writing.
- The use of paragraph linking devices increased with age partly, of course, because 10-year-olds wrote more paragraphs anyway. The 8-year-olds showed 28 examples of linking paragraphs by conjuncts or adverbials, whereas there were 78 examples in the 10-year-olds' scripts. Just 15 of the eighty 8-year-olds used these paragraph links, whereas 32 of the 10-year-olds did so. For narrative writing there were twice as many examples of use of conjunctions and adverbials of time in the 10-year-olds' scripts than in the 8-year-olds, demonstrating their more developed sequential story-telling skills.
- At age 10 there were twice as many examples of links by conjuncts or adverbials in narrative (53) as in non-narrative writing (20). Nineteen out of forty 10-year-olds used such links in narrative writing

whereas only 12 did so in non-narrative. The limited use of conjuncts and adverbials to link paragraphs in non-narrative writing was noted in both age groups, though there was more use by the 10-year-olds.

Countries

- 38% of the total of appropriately or partly appropriately used paragraphs occurred in the Singaporean sample, followed by 27% in the Australian sample, 22% in the sample from England and 13% in the USA scripts. The average number of appropriate or partly appropriate paragraphs per script, across the age groups and tasks, was 4.0 paragraphs per script in the Singaporean sample, 2.8 in the Australian sample, 2.3 in the English sample and 1.4 in the sample from the USA.
- The Singaporean scripts showed the greatest use of paragraphs across the age groups and tasks, except for 8-year-old non-narrative scripts (average of 3.3 paragraphs) where they used rather less than the Australian sample (average of 3.6 paragraphs).
- The Singaporean sample's score was particularly striking in the 8-year-olds' narrative scripts, where seven of the 10 writers used 30 paragraphs appropriately or partly appropriately between them. Scores for the other three countries for 8-year-olds' narrative writing scripts showed much lower incidence of paragraph use, with averages of 0.9 for the Australian sample, 0.8 for the American scripts. In the sample from England, only four paragraphs occurred, all in one script.
- Paragraph use in narrative writing increased considerably for all countries between the 8-year-old and 10-year-old scripts, most noticeably in the samples from England (average use 0.4 and 4.8 paragraphs per script) and from the USA (averages 0.8 and 2.7). Again, at age 10, Singaporean scripts used most paragraphs (average use 5.8 per script) with the Australian 10-year-olds' scripts averaging 4.0 paragraphs.
- In the non-narrative samples from the other three countries the 10-year-olds actually wrote fewer paragraphs than the 8-year-olds: Australian 8-year-olds' scripts averaged 3.6 paragraphs, and their 10-year-olds' 2.7; England's 8-year-olds' sample averaged 2.8 paragraphs whereas the 10-year-olds average fell to 1.1 and the American sample, which also used the least number of paragraphs, averaged 0.8 paragraphs at age 8 and 0.5 at age 10.
- In non-narrative writing the majority of the 21 examples of links using listing, ordering or time conjuncts were in the Australian 10-year-olds' scripts. The very small number of links using contrasting or re-focusing (five examples) all occurred in Singaporean scripts.
- More Singaporean children overall linked their paragraphs with conjuncts and adverbials (six out of the twenty 8-year-olds and fourteen out of twenty 10-year-olds. Three Australian, one English and two American 8-year-olds did so and at age 10, these paragraph links were used by nine of the 20 Australian children, five of American and two of the English children.

Textual Organisation

The 160 scripts were analysed for four main organisational features: the ability to produce an effective opening and ending, to establish a relationship with the reader and to maintain cohesion/coherence, each of which was rated on a scale of 1 to 4 (the highest quality).

Summary of main features

The coding frame for textual organisation required more qualitative judgement than the other frames and deciding on a score on the 4 point scale was not always easy and hence the findings on textual organisation are the most tentative in this report.

Handling textual organisation successfully was challenging for both age groups in the sample and scores of 4 were relatively rare. Individual children tended to get fairly consistent scores across most aspects, suggesting that these were skills which developed in tandem.

Most writers handled openings with more confidence and skill than the other aspects. This might be a reflection of enthusiasm, concentration, time or an indication that teaching focuses more on explicit strategies for opening a piece of writing than for developing or ending it.

While the pattern for narrative showed clear development between age 8 and 10, especially in the English and American samples, the absence of the same pattern for non-narrative was surprising. Eight-year-olds not only handled textual organisation better in their non-narrative than narrative writing, they also performed better than the 10-year-olds on the same non-narrative task.

At age 10 the Singaporean and Australian 10-year-olds were the highest scorers in narrative writing and the narrative writing of their 8-year-olds suggested they had been explicitly taught some skills of textual organisation. At both 8 and 10 years Singaporean scripts had the highest average level of overall awareness of cohesion and coherence and of specific awareness of cohesion by sustaining theme or form in writing narrative texts. The comparison with their considerably lower scores for non-narrative suggested the writers might have been less familiar with this than with narrative.

Overall assessment

- Openings were the most successful feature of textual organisation with 53% of the sample scoring 3 or 4 for the overall effectiveness of their openings, giving an average score of 2.4 per script.
- All the remaining three features were slightly less well handled. 33% of scripts were rated 3 or 4 for overall effectiveness of their endings (average score 2.2) and 31% (average score 2.15) both for effectiveness of establishing a relationship with the reader and for maintaining textual cohesion/coherence.

Tasks

- Scores for overall quality of textual organisation were very similar for narrative (average 2.25) and non-narrative (2.22).
- Openings in the narrative task scored slightly higher marks for overall effectiveness than non-narrative openings, with 53% of scripts scoring 3 or 4 out of 4, (average score 2.45) compared with 52.5% for non-narrative openings (average score 2.35). However narrative openings were handled considerably more effectively by the 10-year-olds than the 8-year-olds, whereas, somewhat surprisingly, 8-year-olds scored better than 10-year-olds for effectiveness of non-narrative openings.
- In terms of signalling the theme or topic, 8-year-olds performed better in the non-narrative task than the narrative (average scores 2.5 and 2.75) and 10-year-olds the other way round (non-narrative 2.2, narrative 2.9). A similar pattern was found for the other aspects of openings.
- The differences between narrative and non-narrative textual organisation were most marked for endings with 43% of narrative scripts scoring 3 or 4 (average score 2.35) for the effectiveness of their endings, compared with only 26% (average 1.95) for non-narrative.
- Endings were better handled in narrative than non-narrative. On all but one aspect over 50% of the narrative scripts scored 3 or 4 marks whereas for the non-narrative, in all but one aspect, less than 40% scored 3 or 4 marks.

Age groups

- 8-year-olds performed better on all features in non-narrative writing than in narrative, whereas 10-year-olds performed better on all in their narrative writing compared with their non-narrative.
- The 10-year-olds' narrative scripts showed greater effectiveness than the 8-year-olds' for each of the organisational features analysed. Eighty per cent of scripts by 10-year-olds scored 3 or 4 for overall effectiveness of openings (average score 2.9) whereas only 30% of 8-year-olds did so (average score 2.0). The differences between the age groups were borne out by scores for individual aspects of narrative openings with 10-year-olds scoring consistently more on providing contextual clues, establishing genre or theme, and initiating a narrative problem. Eight-year-olds were rather better at these latter two than they were at giving contextual clues.
- The pattern was similar though not quite so pronounced for endings, with 60% of 10-year-olds' narrative scripts scoring 3 or 4 for overall effectiveness of endings, compared with only 27% of 8-year-olds' (average scores 2.7 and 2.0). This relationship was repeated in the individual aspects of endings with 10-year-olds scoring consistently higher than 8-year-olds for evidence of closure or resolution, congruence with genre or theme, reference to opening and producing a coda or comment - the aspect on which 8-year-olds scored best. Similar development between 8 and 10-year-old writers was demonstrated in establishing a relationship with the reader (average scores 1.8 for 8-year-olds and 2.4 for 10-year-olds), maintaining cohesion and coherence (average 1.9 compared with 2.4) and overall quality of textual organisation (2.0 and 2.5).
- Strikingly, however, there was no similar pattern of improvement between age groups in non-narrative writing and for some features the cumulative scores for 10-year-olds were lower than those for 8-year-olds. For effective non-narrative openings only a third of 10-year-olds scored 3 or 4, (average score 2.1) whereas nearly three-quarters of the 8-year-olds scored 3 or 4 (average score 2.6). This was

repeated in the scores for individual aspects of endings with just over three-quarters of 8-year-olds scoring 3 or 4 on signalling the theme or topic and just under three-quarters gaining a similar score for signalling genre or form, whereas for 10-year-olds the equivalent results were just over one third and just under one third.

- This surprising pattern was repeated for endings with 8-year-olds averaging a score of 2.1 compared with the 10-year-olds' of 1.8. On individual aspects of endings scores were closer between age groups but 8-year-olds performed slightly better than 10-year-olds on three out of the four aspects.
- The average scores for overall quality of textual organisation for non-narrative were the same for both age groups at 2.2, while average scores for establishing a relationship with the reader (2.2 for 8-year-olds and 2.1 for 10-year-olds) and maintaining cohesion and coherence (2.1 and 2.2) differed by only a decimal point.

Countries

- Differences between individual countries did not follow any obvious pattern. On overall quality of textual organisation across age groups and tasks, the Australian average score was highest at 2.45, followed by Singapore with 2.3, England with 2.17 and USA with 2.0. Singapore's 10-year-olds scored particularly well on narrative textual organisation (average 2.8) while narrative samples from England's and USA's 8-year-olds shared the low average score of 1.8.
- Each country's sample showed improvement in the overall effectiveness of narrative openings between 8 and 10 years, particularly scripts from the USA where 8-year-olds averaged a score of 1.9 and 10-year-olds 3.0. Each showed similar progress on the individual aspects of narrative openings. While 8-year-olds from every country scored at least as well or better on initiating the narrative problem as they did on signalling genre and theme and establishing clues to context, 10-year-olds did least well on this aspect, especially the sample from England (average 2.2), compared with Australia and USA (3.0) and Singapore (2.8).
- Singapore's 10-year-olds averaged the highest score (3.1) for effective narrative endings, with each country showing progress between 8 and 10-year-olds. On individual aspects of endings Singaporean 8-year-olds scored well across all aspects, as did Australian 10-year-olds, but overall differences between countries were small.
- For non-narrative scripts each country showed the pattern of 8-year-olds performing better than 10-year-olds for openings and endings, though differences were only marginal for Australia, whose 10-year-olds scored more than those of the other three countries for most aspects of effective openings and endings.
- For non-narrative scripts the Australian sample did not show the unexpected results of 8-year-olds scoring better than 10-year-olds. In all aspects of openings and endings, the Australian 10-year-olds did as well or better than their 8-year-olds. However while their 10-year-olds tended to score better than other countries', their 8-year-olds also scored worse than others in some aspects, notably on openings. For the other three countries 8-year-olds scored higher than 10-year-olds on most non-narrative features, though England's 10-year-olds scored better than their 8-year-olds on providing a summary (average scores 1.9 and 2.6).

- Scores across countries for establishing a relationship with the reader were close both for age groups and tasks. The Singaporean 10-year-old narrative sample was the highest scoring (average score 2.6) for overall effectiveness in this feature. On individual aspects of reader relationship Singaporean narrative 10-year-olds scored well on maintaining pace and viewpoint (average 2.9). For non-narrative the samples from England, Australia and the USA had comparatively low scores for sustaining argument (average 1.6 - 1.8).
- For maintaining textual cohesion and coherence Singaporean 10-year-olds' narrative scripts again scored well (average 2.8), though their non-narrative sample was the lowest scoring country for this aspect (average 1.9). Australian non-narrative 10-year-olds scripts scored well specifically on textual coherence, and overall scores for each country were slightly higher for this aspect than for cohesion. For lexical harmony the Australian and English samples scored marginally better than the other two.

Non-standard features

A list of 12 non-standard features commonly used in writing was employed to give consistent measures of deviations from standard English.

Summary of main features

As noted above, there were relatively few of these features used and such non-standard forms do not appear to be a major impediment to writing in standard English for any of these groups of writers.

Four out of the six commonest non-standard features concerned verbs, suggesting a starting point for teachers who wish to address this issue.

Overall assessment

- The overall incidence of these features was relatively low, amounting to an average of less than one per script and was broadly consistent with other studies of children in England.
- There were several types of non-standard features associated with verb use and form. The most commonly occurring feature (23 instances) was the use of a singular subject with a plural verb and there were 12 instances of a plural subject with a singular verb. The second commonest feature was non-standard irregular past tense forms (20 instances); there were also nine instances of non-standard irregular past participle forms.
- The third highest incidence was in non-standard use of prepositions (17), followed by non-standard uses of the definite/indefinite article (15).
- The remaining four features analysed produced so few instances as to be not significant: use of *is/was* after there with plural nouns (4), adjective used as adverb (3), *me* with subject noun phrase (3), use of preposition in place of a verb, eg *should of* (1).

Tasks

- The difference between the two tasks was consistent but relatively slight, with 51 non-standard occurrences in the narrative writing overall and 56 in the non-narrative pieces.
- Both age groups had higher scores for non-narrative than narrative. The non-narrative task called for writing about something of which the pupils had personal experience - their own school - and this more personal dimension to the writing may be connected to the higher incidence of non-standard usage.

Age groups

- There was a tendency for the older pupils to use fewer non-standard features than the younger ones. The 8-year-olds produced 61 instances of non-standard features as identified here, whereas the 10-year olds only had 46.

Countries

- Differences between the national groups studied were quite consistent, although they varied between the two age groups studied.
- It was noticeable that in each category: 8-year-old narrative, 8-year-old non-narrative, 10-year-old narrative, 10-year-old non-narrative, the Singaporean sample came out with the highest frequency of non-standard forms. On the one hand, this might have been expected in view of the nature of this sample as second language learners who have not yet mastered standard English and yet the result was surprising in view of the presumed influence of socio-cultural factors leading to the use of non-standard forms.
- In summary, England and the USA had similar totals, with Australia registering a higher score, essentially because of the preponderance of non-standard forms in the samples from the 8-year-olds. Bearing in mind the low incidence of non-standard forms overall and hence the small numbers of instances within each country, the 8-year-old samples, for both narrative and non-narrative, scripts from England showed the lowest incidence of non-standard forms, followed by scripts from the USA, Australia and then Singapore. The picture was slightly different for the sample of 10-year-olds, where for narrative the American scripts showed the lowest incidence of non-standard forms followed by scripts from Australia, England and Singapore, while for non-narrative, scripts from the USA, Australia and England all showed similar incidence, followed by Singapore.