

## **P13: USING LAPTOP COMPUTERS TO IMPROVE CHILDREN'S REPORT-WRITING SKILLS**

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### **Aim**

To investigate how using a laptop computer could improve children's non-narrative writing skills, in particular non-chronological report composition skills, in the Year 6 class. The research was carried out over one week in the spring second half term, 2004.

### **Background**

Year 6 children have each been working with laptops in the classroom for almost two terms. Although now an embedded process in the Year 6 curriculum, the use of laptops has not been without difficulties, especially technical problems. This aside, I noted that laptops used for literacy tasks were motivating reluctant and slower workers to complete tasks within the time allowed. Using paper and pen in a similar exercise appeared to take considerably more effort to complete on time. This seemed to be more evident with boys in the class. Children appeared more motivated to 'write' when using their laptop, and their verbal responses to tasks suggested they believed they had produced a piece of work of superior quality to their handwritten work.

The improvement of children's writing, in particular boys' progress, has been a whole school issue, and in preparation for the end of KS2 SATs is a particular concern for me. The research focused upon a group of children, predominantly boys, regarded as 'underachieving writers'.

The class of 31 Year 6 children from this semi-rural school in NE England have been taking laptops home on a daily basis since November 2003.

### **Expectation and Intended Improvements**

Having taught in Year 6 for six years and being very familiar with the curriculum and the way in which children respond to aspects, themes and concepts of the literacy curriculum, I was interested in exploring how ICT would impact upon composition and the effect of writing. I asked myself, 'Will ICT improve and secure understanding of non-chronological report writing beyond existing methods and resources?'

Children were highly motivated when working at their laptop. Time became less of an issue when children were completing their tasks. I therefore believed:

- children's writing would be well organised and layout would be enhanced by the use of technology. Children would be able to quickly organise their work under appropriate paragraphing using cut and paste.
- children could gather information from the internet to further support their ideas and this would enable children to write more informed reports. When children understand their subject they will be more motivated in the completion of work and productivity will be increased.
- with less concern for the presentation of handwriting and spelling (identification of errors made), children would concentrate upon composition and affect. The techniques of writing would therefore be improved.
- writing would be concise and less muddled, using the features of a word processor to remove unwanted text, therefore engaging the reader with a clear report.
- The identification of grammatical errors would enable children to compose grammatically correct sentencing.

- The motivation of the laptop would enable *all* children to produce a complete (and neatly presented) report in the given time.
- increased enjoyment through the use of ICT would raise achievement.

## **Implementation**

The research focused on four report writing literacy sessions which compared and contrasted the use and contribution laptops made to improve the composition and affect of children's writing of reports. The sessions allowed for traditional pen and paper methods to be weighed against the laptop.

Children were encouraged to discuss the tasks and outcomes and comment on their success, attainment and understanding of how the laptop improved their writing.

The children chose two '*highly interesting*' topics to report on. These ranged from hobbies such as football, horse riding, to interests in dinosaurs, and a recent class visit to a residential activity centre. The children were familiar with the layout and style of a report and had previously written one report on a given topic. We discussed prior to both lessons the features of a report.

The children produced one word processed report (laptop) and one hand written report for comparison. It was stressed that their chosen topics had to be of equal interest, to enable the evaluation to be measurable.

The children were not provided with feedback from the first report (laptop) until the second report had been produced, so that this would not have an effect on the children's composition. Children are very familiar with the accessible features of the software. The children have good word processing skills.

In session three and four the children were given topics to research and then produce a report. Both topics were less appealing as I wanted to investigate the use of a laptop to enhance writing without the motivational aspect of subject matter. Discussion of complex sentencing, engaging the reader, technical vocabulary, descriptive and factual language, generalising statements etc was used to prompt children to concentrate on improved composition.

Before and following the tasks, children actively discussed their work and reflected upon the processes and results. Children were asked to compare methods, level of interest and motivation, and the quality of their writing.

## **Collection of data**

Prior to the tasks the children were presented with a questionnaire to evaluate the use of laptops in the classroom, and their attitude towards its use and value. The children quickly identified possible differences between pen/ paper and ICT methods, motivational differences and accessibility of tools to improve writing. The children were asked to summarise the key benefits and improvements, if any, they believed the laptop made to their writing.

Their written comments included a variety of observations:

*'It does make a difference. It makes me write faster and it wants me to write.'*

*'You can write faster and you can move text about on a laptop – and with normal methods you have to start again. It does motivate me because it makes me feel important.'*

*'Yes, because the computer tells you if your spelling is wrong. With laptops you can copy and paste information or put it into your own words. I think it motivates you because it is just the novelty of feeling like you are in an office.'*

*'The dictionary and thesaurus are more accessible because it is quicker. And it automatically checks your work for you.'*

*'A laptop can improve your writing because when you're on a laptop you feel all grown up and you can write all grown up.'*

*'You can spend ages doing your writing and it won't save or it crashes. You have to start again. That doesn't happen with your pencil.'*

*'Does ICT make a difference to my writing? Not really because you are not learning to write you are learning to push buttons.'*

Written observations were made of the children as they worked through the activities. Children responded verbally to questions as they made progress. Work from both laptop and hand-written tasks were analysed and assessed against the English SAT marker's mark scheme. Children were asked to make comments on their writing, the processes used, and suggest ways their reports could be improved. I recorded their comments.

## **My conclusions from the research**

### *1. Does ICT improve composition and the effect of writing (attainment)?*

Comparisons were made between the children's ICT produced reports and their handwritten reports. The first two texts to be produced were compared to the second task's outcomes.

- The focus group produced far more writing when using the laptop. The children believed their work was an improved text using their laptop. Their response to laptop work was positive and claims were made that *'the laptop makes my report more exciting and like a proper report.'*
- Without the concern for handwriting and presentation skills, and spelling and grammatical errors, the children were encouraged to concentrate upon the sentences they produced. The children identified at the start of the ICT work that they could focus on the composition of their work, although the computer generated work made only a marginal difference to the focus group's writing.
- Only one of the underachieving writers in the focus group achieved a higher mark in their laptop tasks, using a wider range of connectives and complex sentencing. His work was logically organised, whereas in the pen/ paper methods his simple sentences lacked connectives and clauses. Other children in the focus group showed little difference made to their writing beyond punctuation, which the computer automatically identifies.
- Interestingly, when children composed text away from the laptop they failed to use a dictionary and thesaurus to improve and inform their writing. It does appear that children come to rely on automatic correction procedures and are reluctant to check vocabulary. Several children made comments to this affect such as *'It takes too long to use a dictionary and thesaurus. You have to find the word; it takes ages because you sometimes can't find it. The laptop does it straight away.'* In all but a very small minority of the writing, vocabulary improvements did not improve the overall effect of the writing.
- Although children made full use of the laptop's dictionary and thesaurus, finding it more accessible than books, children relied on the correction facilities rather than identifying errors for themselves. Children used the autocorrect facility, often substituting incorrect words. This confused the meaning of the sentence, although several children did not notice this as they worked.
- Several children became preoccupied with finding the right border and pictures to enhance appearance rather than improving the effectiveness of sentencing or manipulating text for effect. One child remarked, *'When you're finished you start "faffing" which you don't do with writing. You just want to get that done.'*
- Children tire far more quickly in handwritten tasks, and manage to sustain enthusiasm for longer at the computer.

- The use of editing their work, cutting and pasting to reorganise their work for example, was a time saving resource. Slower workers benefit from being able to edit their work without having to write it out again.

## 2. *Motivation and Self-esteem*

Generally, children appeared to be more motivated to complete the tasks on the laptop rather than paper methods. There was a notable difference in the way differentiated ability groupings responded to the use of the laptop.

- Most able and talented children claimed they were equally motivated to complete tasks with and without the aid of ICT. This was evident across their work, although comments were offered with handwritten work, such as, *'Sorry, I made a few crossings out, and it's not as neat as my typed report.'*
- Children commented on the motivation of producing colourful and attractive work.
- Those whom I had identified as underachieving writers produced writing within the allocated time and were keen to improve it further. Their work was attractively presented and the children made comments relating to the satisfaction they felt when it had been printed. Children within the focus group remained on task and wanted to complete further work at home relating to in-class tasks. Raised self-esteem is evident. When children had used the laptop during one lesson, they appeared to participate in the following lesson with increased enthusiasm.
- Less able individuals, especially children with special educational needs, were encouraged by the creative aspects of the laptop. They immediately added clip art images or copied photographs from the internet before they began to write, but continued to struggle to complete work on the laptop as they do with hand written tasks. Overall, I felt less able children found the process more frustrating, unless they worked with a partner.
- Children are keen to have their work discussed with the class and displayed for others to see. The use of laptops seems to promote competitiveness between individuals to see who can find the most interesting/ unusual pictures etc.

## 3. *Enjoyment*

All children enjoy working with a laptop. They feel a great sense of importance and the climate of learning changes when children collect their computer from the lap safe. After two terms of using the laptops on a daily basis at home and at school, the children have continued to take pleasure in this way of working.

## 4. *Curriculum Coverage, accessibility and support*

- Laptops in the classroom enable all children to access information quickly and allow children to make relevant research, which would take longer through other means. At their seat they could access information to increase knowledge on a given theme, for example the report to be written on 'rubber'. Individuals who struggle to access information in books find success when using search engines, for example.
- For subjects where it is difficult to teach without the support of plenty of supporting material, such as history and aspects of R.E., laptops address resource difficulties.
- Children with special educational needs, for example those with dyslexia and dyspraxia find the laptop and pen/paper equally challenging. Keyboard skills, which are developing, make it difficult to see if progress has been made. Frustration is evident because typing is time consuming, although work can be easily deciphered. Until keyboard skills are in place, children with special

educational needs will work more slowly than other children, although hand eye coordination and fine motor skills should be improved.

5. *The Laptop versus the pen*

- I firmly believe laptops enhance the classroom climate for learning. Children approach writing tasks with increased enthusiasm on the computer, more so than using paper/ pen methods. I believe the laptop motivates children in and beyond the classroom, as children are eager to complete or improve work at home. This enthusiasm, however does not appear to impact on the handwritten tasks, in fact children groaned when asked to hand write it.
- Laptops improve awareness of presentation and instil a sense of pride and achievement in their *word processed* results, but this does not impact on handwritten texts. If investigated further, I am convinced handwriting would become more of an issue. Children's handwritten work was untidier than usual.
- Tasks are completed within time and laptops enable children to edit throughout the process and sustain enthusiasm. The ability to cut and paste enables children to redraft work without rewriting out text. This raises self-esteem and allows children to see success.
- I believe the tools for writing make little difference to composition and effect. Generally, children spent more time improving the appearance of work using a laptop, but there was little evidence to prove that it improves technique, coherency and structure of writing, for example.
- With further comparisons over a longer period, I believe the laptop would affect the use of dictionaries and thesaurus. Within four sessions, most children appeared unwilling to use them in the course of their hand writing.

### **Learning from this research**

1. Involving the children in the action research encouraged them to understand that laptops can make writing a report easier and quicker, but other skills have to be applied. The children were encouraged to reflect upon the learning process and ways in which the laptop can improve our writing.

The action research has answered questions raised as to the impact on the learning in the classroom. Laptops have a purpose and can enhance learning, creating enthusiasm and motivation, but should not replace paper and pen methods. As the use of laptops across the school is increased and children from other year groups take home a laptop, this will inform the planning of future use.