

Using SMART Notebook 10 for refining and presenting information

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Overview

Sam Custance had already written one case study, on active revision strategies for C/D borderline students, when she asked to submit this additional contribution at the end of the project. Her focus is on how the introduction of a SMART interactive whiteboard to her classroom helped students with their problems in refining and presenting information. The interactive nature of the board encouraged students to contribute and share their written work in public. Tools also made it easier to illustrate planning and drafting and to focus on individual words or phrases. Sam provides a wealth of practical examples and concludes with a useful list of 50 teaching and learning ideas. Whilst her examples are from the SMART Board software, users of other boards will find much here which should inspire them.

The abolition of external tests at the end of Key Stage 3, announced shortly after the completion of the project, means that references here to the detail of the Year 9 examinations no longer apply, the skills that Sam develops with her students by using the interactive whiteboard remain important – and hard to teach.

Introduction

I work in a small rural secondary school. In September 2007 the college did not have SMART boards although we had several Cambridge Starboard interactive white boards. However, when it was revealed that the English department were to gain a second interactive white board and that it would go into my new room (having had one of the Cambridge boards in my previous classroom) I was given the choice between what I already knew and a SMART board. To help me make this decision, I visited a classroom in a local college which had a SMART board. Within moments I had written on the board, changed the colour, size and position of the text. I was hooked.

Lesson aims

The lessons that my case study will discuss includes those that led my Year 9 class towards their National Curriculum Tests and my Year 11 class's revision for Paper 1 Section B and Paper 2 Section B, as well as how I have used the interactive white board with a class of Year 8s who, at the start of the year, all had spelling ages between a five- and seven-year-old. My aim for all three groups was for them to experiment and develop their understanding of the importance of composition and effect. For example, for the Year 9 Writing Paper, composition and effect for the longer writing task is worth 14 out of a possible 30 marks and for the shorter writing task is worth 8 out of a possible 20 marks. Therefore, I needed to ensure that my students were able to maximise their understanding of the question and then writing their own response.

Deciding on a topic

The hard-to-teach topic that I have chosen to address is that of ‘refining and presenting information’. This seemed logical as this case study will focus upon the use of the SMART Notebook 10 software.

During the last academic year, my Year 8 students, whose spelling ages ranged from a five-year-old to a seven-year-old with their reading ages (NFER test results), ranged from a six-year-old to that of a nine-year-old. This class of 12- to 13-year-olds were all very reluctant writers and readers; teaching them was a challenge. However, when it came to asking for volunteers to write on the interactive whiteboard I never had a shortage of willing students. I think this is down to the interactive nature of the board. Students enjoy selecting the pen colour, the ability to delete, enlarge and move the text allows for a large number of opportunities. They were also far happier to share their written work in this manner rather than reading it out, or when peer marking was used. The nature of this collaborative software also meant that when students have had difficulty in spelling a word, they helped each other by spelling or sounding the word out. Students could see each other’s work and were keen to build on and develop ideas.

The visual toolbar of the SMART board encourages all learners to access and recognise the tools, this was especially important with my Year 8 class. Here is the tool bar for SMART Notebook 10:



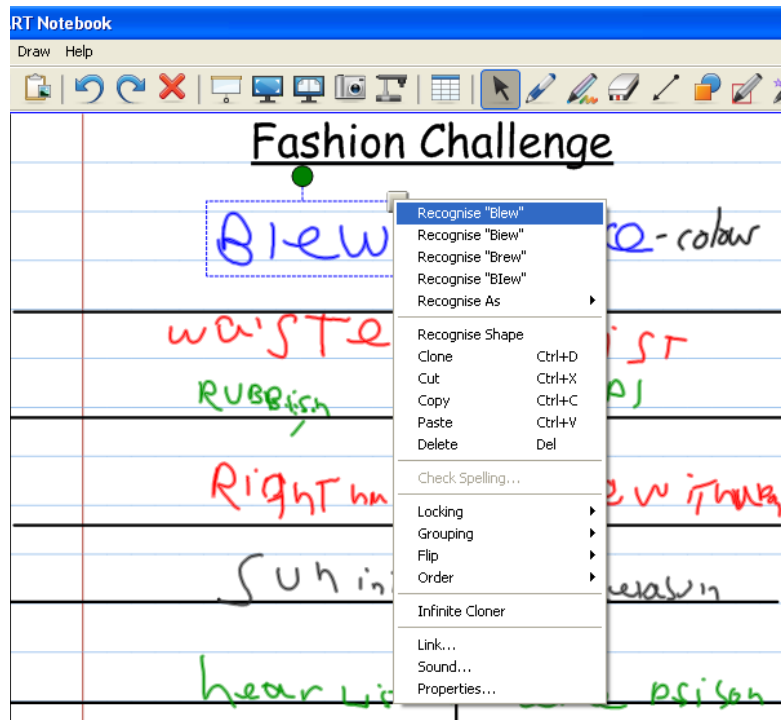
For this topic I have focused on text manipulation at word, sentence and text levels. This is an area where the interactive whiteboard can visually support students with their learning.

Method


I believe that a data projector allows students to access visual resources easily, and if there is the opportunity to use an interactive white board (IWB) then this may encourage students to ‘have a go’. I have found that the vast majority of my students are keen to experiment with the board and enjoy their learning experience. I only have to ask for a volunteer and suddenly hands will shoot up.

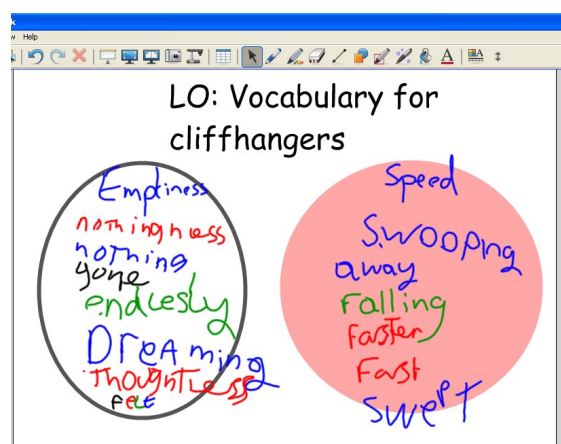
Converting handwriting

One of the rather clever tools that the SMART board contains is that of recognising handwritten words and converting them into a computer type-face. A number of my Year 8 students have handwriting issues. So encouraging them to use this tool meant they not only had to select the word that they wanted, which was a good process for drafting and editing their work, but for those whose letters were illegible, it meant they were encouraged to print clearly rather than scrawl. To make this change, is very straight forward: you simply click on the pointer (the arrow) then left click (or touch the board) touch or click on the arrow and a menu appears. The option to recognise is given, with a list of possible words. You simply touch the correct word. If the word recognition is incorrect, then you can select it, touch the word again and edit the text using the keyboard function. The process is illustrated below. To bring the keyboard up, there are two buttons at the front of the interactive whiteboard; you press the left hand one, which has the image of a keyboard on it. The keyboard can be used in other applications, not just in the Notebook software.



Using shapes

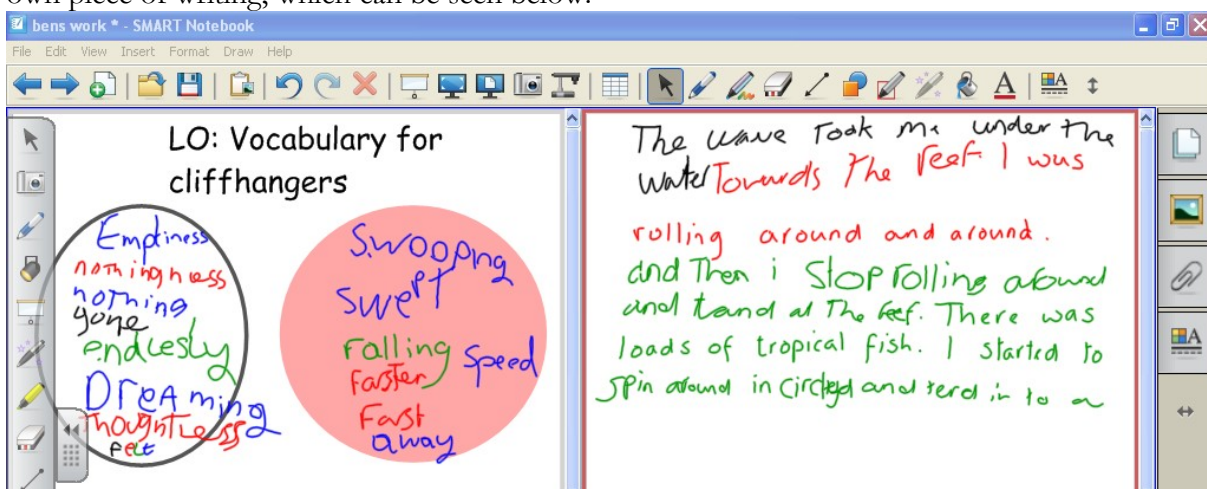
Encouraging students to plan their ideas is always important. The ease of being able to select  shapes meant that asking the students to fill the shape with words always seemed to be an incentive and also meant that my weaker students had a visual expectation of the amount of vocabulary that I was expecting, rather than having a possibly intimidating white space. To select a shape is very straight forward, the icon on the right here is the one you require, and you can change the shape, colour, outline and transparency. If identical shapes are required, then using the clone feature helps with this process. For example, I used two circles with my Year 8 class when I was asking them to think about vocabulary that could be used to create tension. The screenshot below is an example from a starter, from my Year 8 class.



One of the great elements about an IWB is that once you have written a word the board recognises it as an object, which you can then move around, rotate, enlarge, copy, etc. This facility can lead very neatly into categorising and prioritising information so that the words can be placed in a rank order, or

sequence. If you want to group ideas together it is easy to do, select each object, press the arrow that appears on the top right hand corner, move down to grouping and you can then select Group, or Ungroup. If you are using a keyboard, then this can be achieved by depressing the Control (Ctrl) key and clicking on each item and then, with the Ctrl key still depressed, click on G and all of the objects will be recognised as one group. This means that if you want to move a group of ideas together it is easier to do so. They can also be ungrouped by pressing Ctrl R. One piece of advice that I would give before you work on a page is to go to the Gallery and clone the original page, so that you still have your original slide. Alternatively, if you use a prepared slide with another class, then this can easily be saved into your gallery.

The screen shot of this shared vocabulary led to one of the students using the board to produce their own piece of writing, which can be seen below.

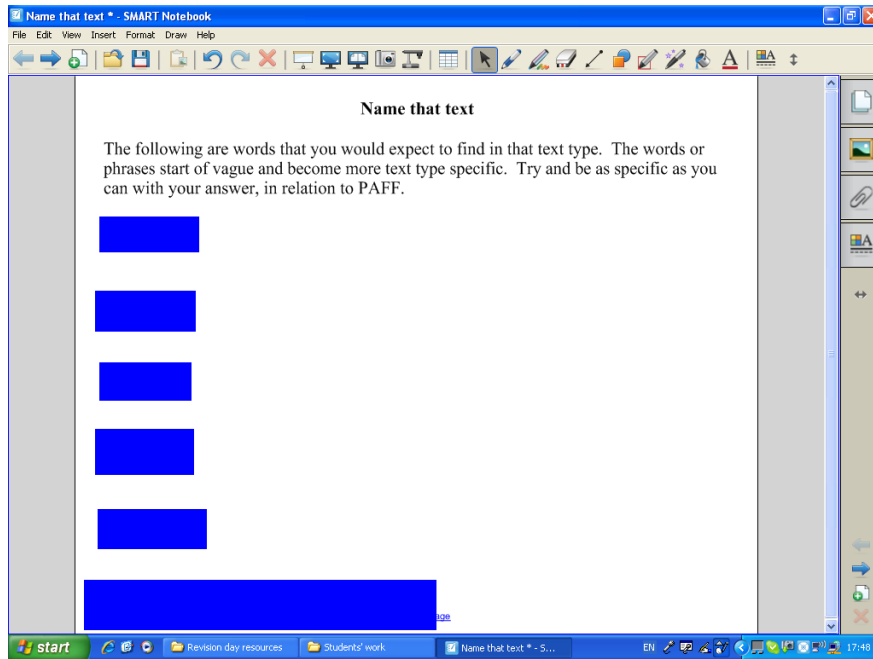


If you want to look at the screen without the toolbars or menus, select View and Full Screen, or press Alt + Enter. The second icon, allows you to see two pages at one time. There are numerous short cuts for the SMART board, which can be found in Appendix B.

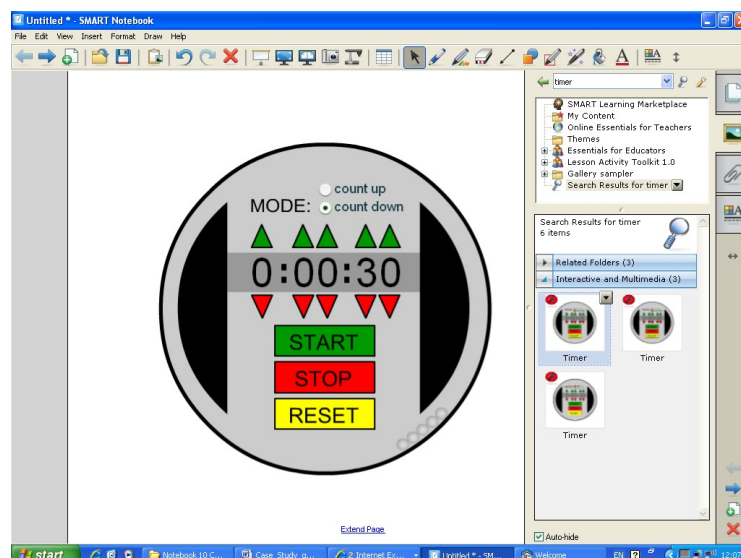


Not only would I encourage teachers to use the software, but once you show your class how to use it, they will want to use it and be able to do so independently. The visual toolbar means that even students with weak literacy skills can operate the software confidently. Providing helpful hints such as using the nail of their finger to move items, or to double check which icon is highlighted minimizes any problems that they might incur when they are in front of the class.

As well as using shapes for planning, shapes can also be used to cover and predict. I used this method for my Year 9s when we were revising composition and effect and the importance of ensuring that their choice of vocabulary matched the purpose and form of the question. In order to do this, I selected vocabulary which would indicate the form and once I revealed the blue rectangle, my students had to work out and write their response using mini whiteboards to relay their understanding to me. This activity worked a little like the old game show 'Name that Tune' but instead of selecting the number of bars, students had to try and 'Name that Text'.

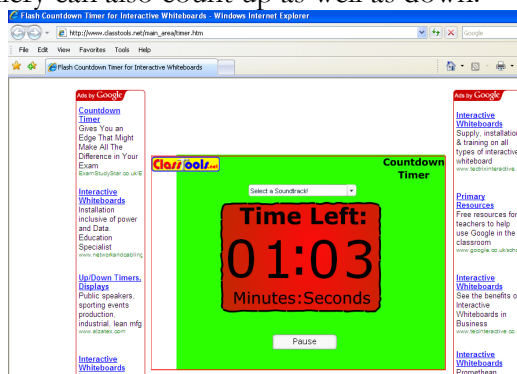


A further difference between an interactive whiteboard and a traditional whiteboard, is the ability to be able to save the work that has taken place. A maths colleague was delighted when she was able to prove to her class when the homework was set, as she quickly brought up the page on which she had written what the homework was and also, importantly for that discussion with her class, when it was due in. Other colleagues have commented upon the value of having an accessible timer. This can be quickly brought up by typing in timer into the Gallery (if you click on the icon that looks like a picture). To move anything from the Gallery to your notebook page is very straightforward: you can either double click on it, or drag it across. Left clicking the cursor on the five little circles on the bottom right hand side allows you to change the size of flash items, so that you can alter their size.



The ability for the timer to both count up and count down can be an incredibly useful teaching and behaviour management tool. There are others, one of my favourite websites also allows you to add

music to your countdown is: www.classtools.net/main_area/timer.htm, my favourites being 'Hawaii 5-0' and 'The A Team', as well as having the traditional 'Countdown' music. Please do expect your class to all go 'du do, du, do, didodeedo' - they won't be able to help themselves! This timer moves a block of colour from left to right, going through the traffic light colours. The length of time you have is dependent upon the length of music. The disadvantages are the adverts either side. This is great for getting your class to pack up quickly but I would probably use the timer in the Gallery for quieter activities. The timer in the Gallery can also count up as well as down.



Year 9 National Curriculum tests

When it came to revising with my class the work that we had done, it was great to select a variety of slides and then using the link function. I was able to recall the different slides, websites etc, with one click. Now this can take place if you call up the document and then minimize it, but I like the Link function as it means I can prepare this method. Being able to go straight to a website is time saving, being able to make hyperlinks is always invaluable. I realise that this is a function that Word has (by pressing Ctrl K to create a hyperlink), I just like that the Notebook 10 software allows the same function.

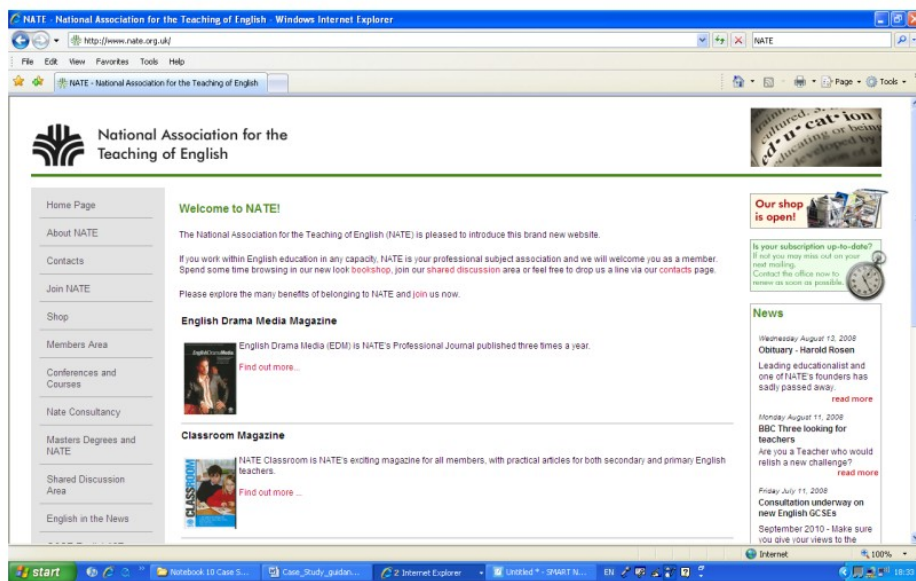
The Gallery

Like any museum, the Gallery of the Notebook software needs to be explored with an open mind to learning. I have found that if I am too prescriptive in what I type into the search bar, it can prevent me from finding what I am looking for. For example, if I type in 'sport' I gain five related folders to browse through and fifteen background pictures. If I type in 'sports', then nothing appears. This quirk in searching is irritating which is why I think browsing the 'Essentials for Educators' and 'Lesson Activity Toolkit' is far better. If I want an interactive Flash resource, then I can select the Interactive and Multimedia folder, of which there are many exciting applications, my favourites being the card sort, multi choice questions (which looks very similar to 'Who Wants to Be a Millionaire?') template and the dice. All of these are completely editable, including the dice which can contain any words or even images. The dice have been used to great effect when generating discussions. For example, when revising *Much Ado about Nothing* I would give each character a number, roll the dice and the students had to select an important quotation from the key scenes and explain how it related to the exam question that we were revising.

Capture tool

When using a SMART board, the Capture tool allows you to make a choice about selecting either a page, a rectangular shape, or even to draw around it. For example, you could draw around a particular word, line, paragraph or picture. The Capture tool also allows you to carry out this process in other SMART 'ink aware' programmes, which include Word, and also allows you to capture Internet websites. This is particularly useful if you are annotating in Word, as Word does not keep the annotations, when you move the toolbar down. When work is captured a Notebook page is automatically opened and the work that is captured appears as an object. As an object, this can then be manipulated, copied, pasted etc.

Here is the NATE website homepage captured to different degrees: the first is when I have drawn around a shape (the NATE logo) and enlarged it, the second is when using the rectangular shape and the third is using the Page Capture facility.



A further technique to draw attention to words, pictures or other elements is the spotlight tool. In Notebook, the spotlight tool can be used to draw attention to a word or phrase, or element of a picture. Changing the transparency means that you are still able to see the rest of the page, below this is set to 50%:

The screenshot shows the SMART Notebook 10 interface. The main content area displays a lesson on 'Repetition' with the following text and annotations:

Repetition

Search for my tongue
 You ask me what I mean
 by saying I have lost my tongue.
 I ask you, what would you
 do if you had two tongues in your mouth,
 and lost the first one, the mother tongue,
 and could not really know the other,
 the foreign tongue.
 You could not use them both together
 even if you thought that way.
 And if you lived in a place you had to
 speak a foreign tongue,
 your mother tongue would rot,
 rot and die in your mouth
 until you had to spit it out.
 I thought I spit it out
 but overnight while I dream,

(munay hutoo kay aakhee jeebh aakhee bhasha)
 (may thoonyk nakhi chay)
 (parantoo ratray svupnama mari bhasha pachi aavay chay)
 (foolnee jaim mari bhasha nmari jeebh)
 (modhama kheelay chay)
 (fulnee jaim mari bhasha mari jeebh)
 (modhama pakay chay)

It grows back, a stump of a shoot
 grows longer, grows moist, grows strong veins,
 it lies the other tongue in knots,
 the bud opens, the bud opens in my mouth.

Handwritten notes:
 - 'wants to empathise' (green) points to the poem text.
 - 'language' (red) points to the poem text.
 - 'Feelings' (blue) points to the poem text.
 - '1) Poetic devices' (blue) lists: Repetition x2, Metaphor - comparison, Simile 'as' or 'like', Alliteration "kit kat", Onomatopoeia - bang.
 - '2) What is the meaning of the poem?' (blue)
 - '3) How does the poem make you feel? Poet's feeling' (blue)
 - '4) Language' (blue)

The next screenshot, below, shows transparency at 10%.

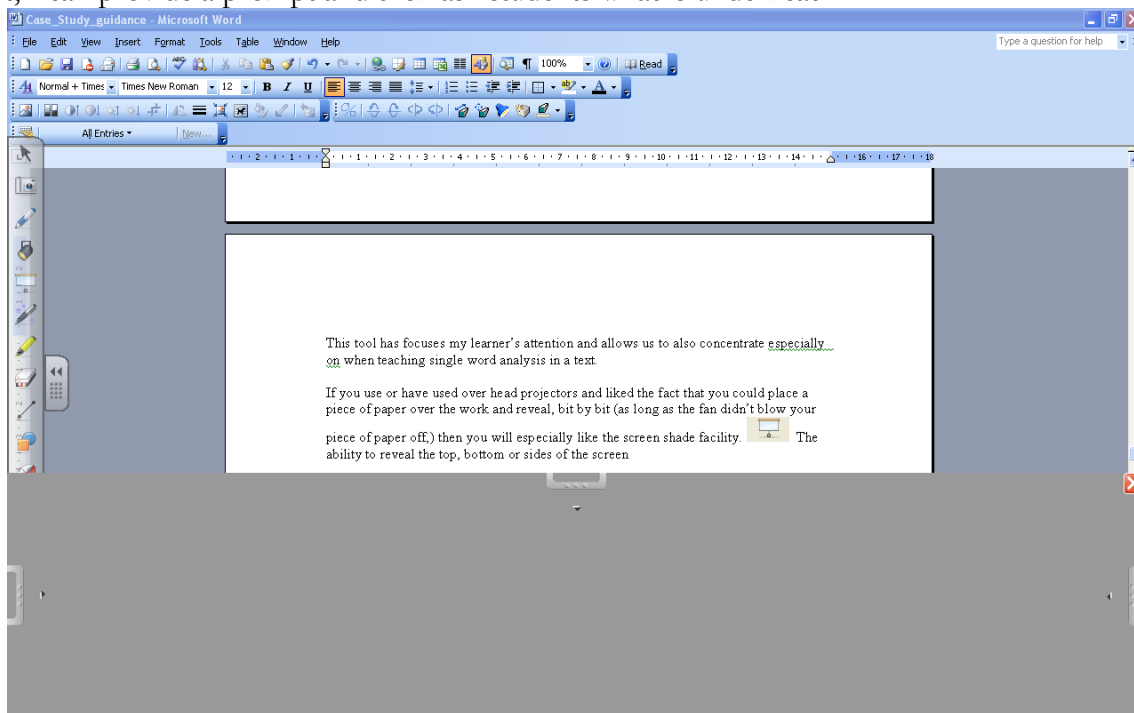
This screenshot shows the same SMART Notebook 10 interface as above, but with a transparency of 10%. The text and annotations are visible but dimmed. The handwritten notes and the poem text are the same as in the first screenshot.

This tool has focused my learner's attention and also helps students to concentrate when you are teaching single word analysis in a text.


If you use or have used overhead projectors and liked the fact that you could place a piece of paper over the work and reveal, bit by bit (as long as the fan didn't blow your



piece of paper off) then you will especially like the screen shade facility, when you click on this icon you can then move the screen accordingly. The ability to reveal the top, bottom or sides of the screen also allows you to reveal and pace your lesson accordingly. This technique was useful when I was teaching my Year 9s about the Reading Paper and their own ability to pace and focus on each question. I have also found that with my Year 8 learners, revealing elements step by step, when it involves tasks that they may be reluctant to carry out is very useful. Also, if I am asking students to recall information, for example from the previous lesson, after bringing up the previous lesson's work and placing the screen over it, I can provide a prompt and then ask students what is underneath.



Key findings

The SMART software can be used when creating SMART Notebook files but also has a handy floating toolbar (see the left hand side of the screen view above) which means you are able to use the tools whenever it appears, or it can be called up – for = example in Word or the Internet. If the floating toolbar is not required then you can remove it; to do this go to the left hand section of the blue toolbar and look for this icon  which allows you to open the menu. 'Other SMART tools' allows you to access these tools: spotlight, screen shade, magnifier, calculator, pointer tool, screen capture toolbar.

What I like about Notebook 10 in comparison to earlier versions is that I do not have to be connected to my SMART board, for example at my desk at school. Also this means that if you do not have a SMART board, you can still have access to Notebook 10 as long as you have a key. You gain a key as long as you have one board in your school (the key can be found on the back of the board or the bottom right hand corner).

Next steps

I have been creating resources for 'Poems from Different Cultures' which have used the technique of revealing the missing word to help my KS4 students develop their single word analysis skills. I have

also been experimenting with the game layouts which SMART have provided in their Gallery. There are numerous interactive activities that can all be edited; to find them type in 'interactive' into the Gallery. They include interactive card sorts, multiple choice quizzes, timelines, word guesses and fully editable dice which can have any words, images or the traditional numbers and more than one die can be rolled. There is a question and answer tile, which is reminiscent of a 'Wheel of Fortune'. There is the ability to play a version of 'Countdown' with random consonant and vowel generators. There is also a voting tool (which is easier to use than tallying up ideas!) and to continue the game show ideas, there is the ability to play a version of Catchphrase, whereby pictures are hidden by tiles – but there is no Mr Fish!

I thoroughly enjoy using my SMART board and I hope that I have inspired you to explore the uses that an interactive whiteboard can offer. The teaching assistants at Holsworthy Community College and I have created a list of 50 teaching and learning ideas – we hope you'll feel encouraged to try some of them. Even if you have another whiteboard or an older version of the SMART software, many of these ideas can still be applied.

Appendix A: 50 teaching and learning ideas when using SMART software

Thanks to the teaching assistants at Holsworthy Community College for helping me create this list after they had received their training.

1. Sorting
2. Crosswords
3. Quizzes (of which there are many templates)
4. Snap – matching pairs of sounds (Soundwrite)
5. Dice – prefix and suffix, key words, key ideas to generate discussion.
6. Syllable sounds on the dice (Soundwrite)
7. Drafts / chess
8. Missing words – cloze activities
9. Cover up words with shapes and make predictions e.g. sounds – predicting sounds, or words in poetry, prose, or any text.
10. Definitions of words – match them up – template
11. Boggle (using dice)
12. Countdown game
13. Interactive timelines / number lines
14. Matching pictures to words
15. Link documents e.g. for revision
16. Capture work and small parts of a work e.g. of a picture – for points of view / art /
17. Annotating a document not in SMART (ink aware applications include Word, Excel etc.)
18. Annotating a web page
19. Annotating a paused image from a moving image e.g. to examine mise en scene, character expressions, body language or product placement, presentation etc.
20. Sequencing e.g. sentences into paragraphs – topic sentences, explanations, PEE
21. Developing punctuation skills – adding in and deleting to then discuss effect of punctuation.
22. Using software with children e.g. Nessy interactively.
23. Cut, paste, copy images, words etc into an annotating document.
24. Exporting into a PowerPoint or PDF format, for revision so that all can access even if don't have SMART software
25. Capturing work to make a collage
26. Playing word / image / number dominoes
27. Guess who?
28. Hangman – football games – spelling, key words, answers to questions
29. Revealing and hiding a word / image / sentence / idea
30. Animate objects e.g. words getting bigger to show importance
31. Banner (ticker tape) for key words, objectives, reminders, spellings etc
32. Venn diagrams for comparisons
33. Interactive maths tools to show students how to use them e.g. protractors, pair of compasses
34. Annotating images with many colours and line types
35. Selecting and identifying parts of an image to magnify
36. Spotlight on particular words, ideas, concepts, to isolate for discussion and analysis – magic pen circle
37. Sharing modelled writing
38. Mind mapping ideas with others
39. Talking ideas through
40. Annotating web pages

41. Clearer instructions with reminders and important points made
42. Focusing students' attention on the objective through repetition e.g. use of banner / ticker tape
43. Ability to recall what has been written on the board, for prosperity / revision / recall
44. Handwriting recognition tool to encourage clearer presentation
45. Flip, rotate, order shapes / objects
46. To use backgrounds, colours e.g. for dyslexics yellow background with black font is easier to read
47. Handwriting lines on a board, in gallery; as well as different types of paper background e.g. graph paper
48. Editable Flash objects e.g. timer, dice, card sorts, sequencing, cards, coins, quiz, dominoes, crossword templates
49. To change, move and vary words / objects to demonstrate the editing and redrafting process
50. Using the timer for organisational issues e.g. packing up, behaviour management tool, timing group work, games e.g. Pictionary

Appendix B: Shortcuts using the SMART board

Ctrl+ or Alt+ means the Ctrl or Alt key along with the letter or number given

File

New = Ctrl+N

Open = Ctrl+O

Save = Ctrl+S

Edit

Undo = Ctrl+Z

Redo = Ctrl+Y

Clone = Ctrl+D

Cut = Ctrl+X

Paste = Ctrl+V

Select all = Ctrl+A

Spell check = F7

Clear page=Ctrl+L

View

Page sorter = Alt+1

Gallery = Alt+2

Attachments = Alt+3

Next page = PgDn

Previous page = PgUp

Full Screen = Alt+Enter

Insert

Blank page = Ctrl+M

Format

Bold = Ctrl+B

Underline = Ctrl+U

Italic = Ctrl+I

Set Item Properties = F4

Unlock = Ctrl+J

Lock in place = Ctrl+K

Draw

Group = Ctrl+G

Ungroup= Ctrl+R

Select = Ctr+1

Pen = Ctrl+2

Creative Pen = Ctrl+3

Eraser = Ctrl+4

Line = Ctrl+5

Shapes = Ctrl+6

Text = Ctrl+7

Help

Contents = F1