

## Cracking inventions – Y4 explanation texts

Prior Knowledge - Check that children can already:  
Identify the key features of simple recount and report texts.  
Express clear opinions about characters' responses to a range of settings.  
Navigate information texts on paper and on screen using knowledge of text-type and layout to identify facts and points of interest.

Experience . take in some broken household appliances (check for safety) and allow children to study the internal workings. Find circuits, switches, levers and cogs. Give time for children to talk together and try to work out what the appliance is for and how it works. Gather key words they come up with during their explanations . e.g. catch, switch, rotate and display on the working wall.

**Familiarisation and immersion in text**  
Read the first page of Until I met Dudley to the class. Allow time for them to study the illustration. What are their first impressions? What do they like/dislike about the text? What kind of a text do they think it is . fiction or non-fiction? Explanation? A story? Ask them to explain fully their ideas. Read the following page . what differences do they notice? How has the text changed? How has this altered what they thought about the book? Ask children for examples of things they thought were true, only to later learn the scientific explanation e.g. eating, the sun rising, televisions

Through discussion and text marking of key features, ask pairs of children to identify the main structure of this text, focusing on the purpose (to explain a process or answer a question), the structure (an introduction followed by sequential explanation organised into paragraphs), the language and presentational features of this text-type, the supporting diagram with labels.

Continue to read through the book, adding any useful technical vocabulary to working wall. In pairs, ask each other questions about a particular appliance. How easy is it to find information quickly? What helps/hinders?

Use the images on the penultimate page. In groups, each describe how the girl thinks each machine works and explain to the class. Read the final page. Discuss children's reactions. Is she really glad? Why has the author written  $\frac{1}{2}$  think..q? How is this further supported by the illustration? Notice the page layout, use of colour and space.

**Phase outcome:** Children can use examples of explanation texts to identify key features: the purpose, structure, language features and presentational features. Children can use their knowledge of the organisational features of explanation texts to find information quickly.

### **Capturing ideas**

Watch one of the Cracking inventions clips. What do the children think of the invention? How effectively do they think it would work? What is it intended to do and how? Return to the film and re-watch. Use IWB tools (spotlight, transparency, capture) to demonstrate how to select interesting parts of the machine itself. Place these into a flow diagram and begin to consider what each part of the machine might be for and how it might work. Model a verbal explanation of how one part of the machine works. In pairs, ask children to orally explain different parts of the machine. Refer to technical vocabulary recorded on working wall.

In groups, watch additional films from the series. Each group make their own flow diagram using captures from the film and prepare and oral explanation to present to the class. Alternatively, create a detailed diagram of particular parts of the machine. Use audio recording equipment (e.g. <http://www.download-audacity.com/>) to record each explanation. Allow time for each group to listen back, improve and re-record. Take care to notice when children accidentally use instructional language instead of explanation.

After having watched the films, how well do the class think each machine was explained? Were any functions missed out? Did they use appropriate vocabulary and language structures? Note down effective language on the working wall.

**Phase outcome:** Children can orally explain a process using appropriate language features.

### **WRITING:**

#### **Model, scribe, support**

With the children, identify success criteria for the writing, drawing on learning from the previous 2 phases. Link to children's writing targets and sentence and word objectives. Use modelled, shared and supported composition to write a first draft of the explanation text of the film you explained verbally. Refer back to the lists, word banks and flow charts. Use pages of the IWB file and still images from the film to gather ideas on, for example, technical names for particular parts of the machine, or oral explanations of how one part might work.

Model the use of paragraphs to re-organise and sequence the text so that the reader can find information quickly and understand easily. Demonstrate re-reading from the point of view of the reader. Does it make sense/explain it clearly enough? Model the links between the labelled diagram and the text . demonstrate moving the text around on the page, numbering and adding further details to the diagram to help the reader make sense of the explanation.

Discuss ways of making the text more cohesive by using appropriate connectives.

Refer back to success criteria and model assessing and amending accordingly.

Give time for children to complete their written explanations, on paper or on screen, individually or as a collaborative piece.

Allow access to the audio recordings, working wall and flow charts/diagrams to support. At appropriate times use response partners to support re-drafting and editing of writing. Use the IWB to project examples of children's writing for modelling of editing and improvement - linked to the agreed success criteria and children's needs. Use Guided writing to support groups or develop writing further, through identification of targets or areas for development.

Consider the presentation of their explanation and relate this to the audience and purpose of the writing task.

Decide on an audience/publication for the finished explanations . e.g. a class book, e-mailed/posted to Wallace, shared in school assembly.

**Phase outcome:** Children can organise text into paragraphs and sequence them effectively. Children can write an explanation text from a diagrammatic plan, using the conventions of the text-type.