



ELMO

# Visualiser

HINTS AND TIPS ACROSS THE CURRICULUM

PACKED WITH  
USEFUL TIPS  
TO MAKE LESSONS  
MORE INTERESTING  
AND ENJOYABLE

GREAT LESSON IDEAS  
USING ELMO  
VISUALISERS

COMMENTARY

By **Dave Smith**  
ICT Consultant and Curriculum Advisor for  
The London Borough of Havering Inspection and  
Advisory Services and Chair of The Visualiser Forum

CREATE A  
SENSE OF AWE  
AND WONDER IN  
YOUR LESSONS

ENLARGING  
SMALL  
OBJECTS

ANYONE CAN  
**USE IT!**

Easy to use  
visualisers



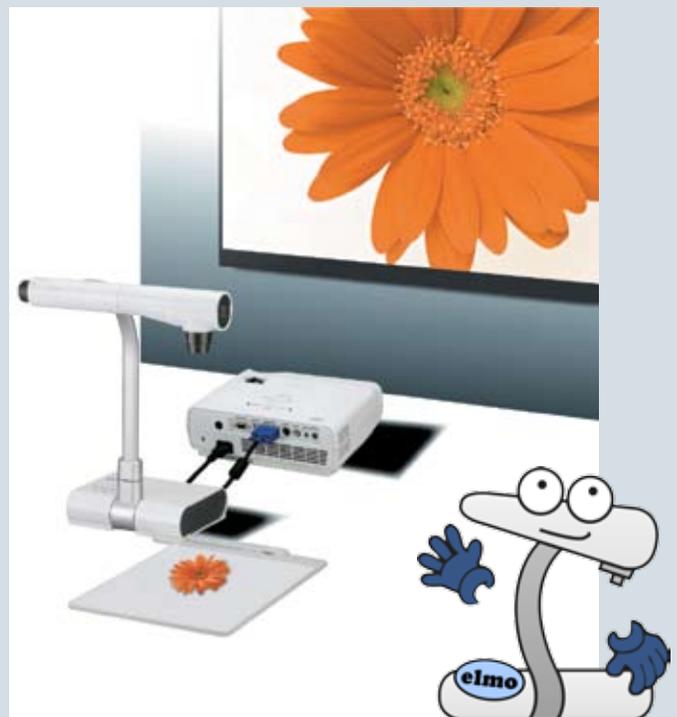
ISSUE 1

# What is a visualiser?

- Visualisers are digital teaching aids that will allow you to display and share a much wider range of information with your pupils.
- Technically, visualisers are electronic imaging tools, sometimes referred to as document cameras, for displaying fixed and moving objects via projectors, digital TVs, PC's and interactive whiteboards. However they are much more than that!

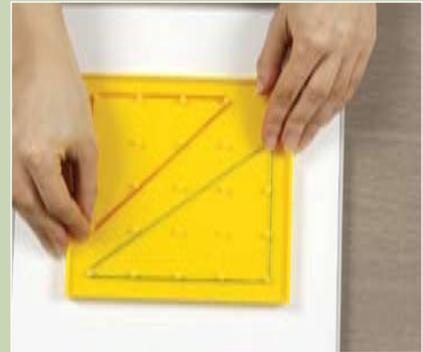


- **To the teacher,** a visualiser is a flexible teaching aid that will allow them to display just about anything from a single cell amoeba to a piano in glorious colour, still or moving, easily and quickly.
- It is also a time & money saving tool that reduces the amount of lesson preparation activity such as copying & printing and allows you to use delicate or costly resource items.
- To your pupils, a visualiser brings a lesson to life! Objects are enlarged and displayed for all to see. Movement, from even the smallest insect, captures attention. From everyday magnification of basic items to the wonders of nature in close-up, a visualiser will retain their attention and stimulate their minds!
- Visualisers help children absorb and retain information as they display live images on a large screen for the whole class to see.
- The most common response from children after their first lesson where a visualiser was used is ***“now I understand!”***



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# THE BENEFITS OF VISUALISERS

**Dave Smith**

ICT Consultant and Curriculum Advisor for The London Borough of Havering Inspection and Advisory Services and Chair of The Visualiser Forum

## ENLARGING SMALL OBJECTS AND INTERROGATING TEXTS USING VISUALISERS

In this magazine we examine the basic uses of a visualiser, to display and enlarge objects, tools and artefacts and interrogate texts. Drawing upon real-life case-studies from classroom situations submitted by teachers, you will see the impact of visualisers on teaching and learning.

By using a visualiser, it is possible to easily enlarge the illustrations in a text book or the scale on a ruler. Visualisers help ensure improved comprehension of complex instructions. Pupils' understanding of key concepts, such as measuring angles are improved by the visual nature of the visualiser. Pupils' manual dexterity and fine motor skills are enhanced, including brushwork and cutting and sawing, through the modelling of activities under the visualiser.

Even the least ICT confident teachers and teaching assistants are instantly engaged by the power of the visualiser.

*So, go-ahead... plug it in, switch it on and you are immediately ready to transform teaching and learning and raise standards in your classroom!*

## 5 FABULOUS FACTS ABOUT VISUALISERS >>

### 1. DISPLAY OBJECTS AND TEXTS WHOLE-CLASS SIZE

Watch as pupils are instantly engaged by the truly visual nature of the visualiser. Let the children use it to explore objects, like plants and minibeasts. A spider or some frog spawn will fill the screen and allow close examination.

### 2. SHARE TOOLS AND IMPROVE SKILLS

Enlarge rulers, protractors and other measuring implements to reinforce teaching points. The impact on practical skills like sawing and cutting and pencil and brushwork in art are immense.

### 3. ZOOM IN ON AREAS OF INTEREST

Focus on particular areas by enlarging it and concentrating on specific aspects – reducing pupil distraction.

### 4. SHARE PUPILS' WORK FOR PEER-ASSESSMENT AND SELF MARKING

Involve the whole class in the assessment for learning process, working to help each other improve writing and other curricular objectives. Thus, aiding the process of Assessing Pupil Progress.

### 5. ANNOTATION OF TEXTS AND OBJECTS

Annotate texts to highlight specific teaching points and to overcome common misconceptions.





## BENEFITS OF USING A VISUALISER >>

SHARE ONE TEACHING RESOURCE WITH ALL PUPILS - reducing photocopying and duplication of resource purchasing.

REDUCES THE NEED TO DOWNLOAD IMAGES AND PURCHASE DIGITAL CONTENT - why use simulated activities when you can share 'real-life' resources?

ALL PUPILS ARE ABLE TO SEE WHAT IS BEING PROJECTED FROM WHEREVER THEY ARE IN THE CLASS - reduce crowding and classroom management issues.

## IMPACT ON PUPIL OUTCOMES >>

- ENLARGING AN OBJECT IMPROVES PUPILS' UNDERSTANDING OF A CONCEPT AND INCREASES CURIOSITY.
- SHARING OF TEXTS ALLOWS MORE FOCUSED ANALYSIS AND REINFORCEMENT OF TEACHING POINTS.
- ANNOTATION OF PROJECTED IMAGES WHILE EXPLORING THEM ALLOWS FOR A CLEARER EXPLANATION AND BETTER UNDERSTANDING.

## VISUALISERS IN THE LONDON BOROUGH OF HAVERING - The teachers, teaching assistants and pupils cannot be wrong!

Visualisers have been transforming teaching and learning and we have been working with Elmo in Havering to develop ways in which visualisers can transform teaching and learning and improve organisational efficiency.

I was amazed at the response. Maybe that's because we have focused on the pedagogical benefits of visualisers. Teachers love them because they are so simple to use and help enrich lessons. Sharing a text or artefact with a whole class, demonstrating a skill in art or design and technology, improving measuring in maths, turning minibeasts into massive monsters, filling the screen for all to see, has meant that schools have quickly recognised the power of the visualiser.

They are now one of the most wanted pieces of hardware - apart from computers - in our primary schools. Even the least ICT-confident staff love to use them. The teachers, teaching assistants and pupils cannot be wrong!

Visualiser  
forum  
creating a revolution in the classroom



www.haveringict.edublogs.org

ELMO

**SCHOOL / LOCAL AUTHORITY:**

St Stephens C of E Junior School  
London Borough of Richmond-upon-Thames

**SUBJECT:** Mathematics

**AREA OF LEARNING:** Mathematical Understanding

**YEAR GROUP:** Year 4 / Primary 5

**LESSON APPLICATION**

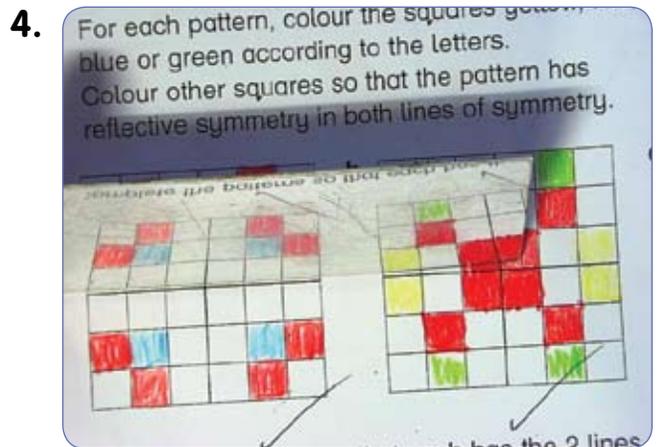
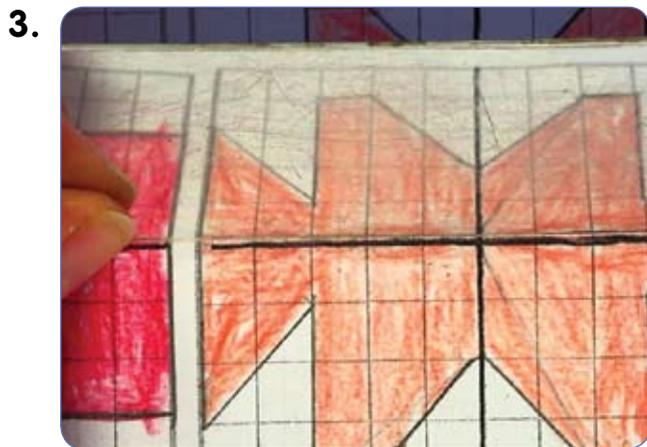
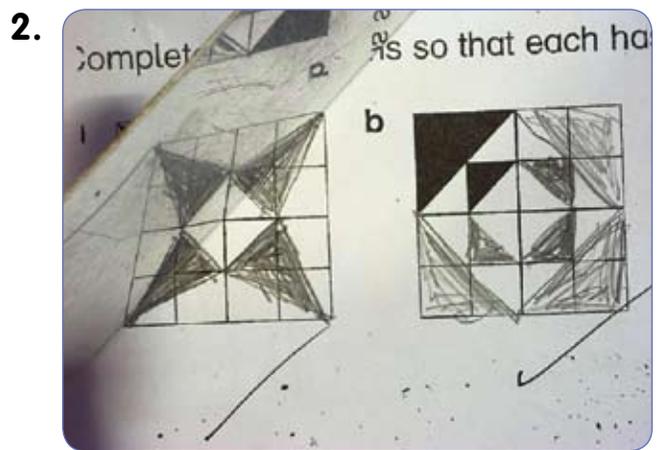
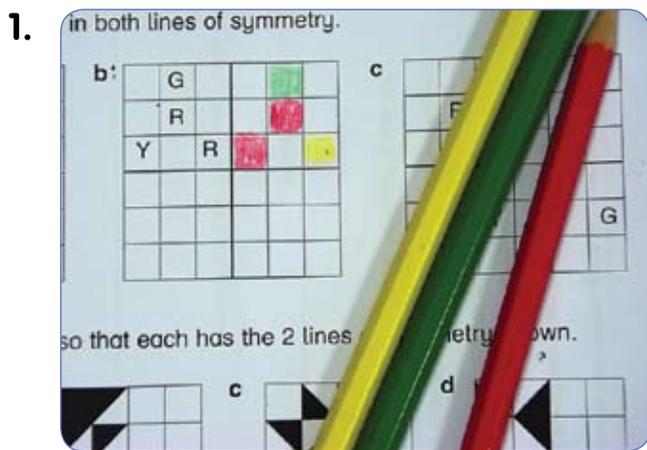
**Symmetry:** To reflect images in 2 perpendicular mirror lines and use a mirror to check accuracy.

**HOW THE VISUALISER WAS USED**

The visualiser was used to model how to check that patterns had been reflected correctly in the mirror.

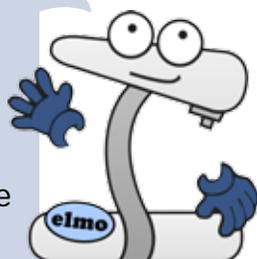
During the lesson regular check-up of pupils' work was undertaken, with the pupils using the visualiser to share their symmetrical patterns with peers.

In the plenary, the completed outcomes were shared with the whole-class to check correct symmetrical patterns and address any misconceptions.



**HINT...**

Angle the camera head to allow for side-on perspective - making it easy to see the mirror image.



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Allows symmetrical images to be modelled by the teacher to a whole-class.
- Easy demonstration of the use of the mirror to check symmetry.
- Check outcomes with the whole class allowing for effective peer assessment.

**SCHOOL / LOCAL AUTHORITY:**

Our Lady's Catholic Primary School  
Warwickshire County Council

**SUBJECT:** Science

**AREA OF LEARNING:**

Knowledge and Understanding of the World

**YEAR GROUP:** Reception / Primary 1

**LESSON APPLICATION**

To observe and investigate features of minibeasts.

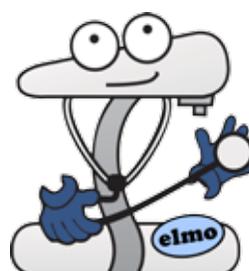
**HOW THE VISUALISER WAS USED**

The children had previously been given instructions on how to use the visualiser. We had discussed different minibeasts and their basic features as a class and the children were then able to use the visualiser as an independent activity to investigate features themselves. The children were given a variety of plastic minibeasts to look at as well as some live minibeasts found in the school surroundings. The children used the visualiser to zoom in on the live minibeasts so they were able to see the features clearly and observe how the minibeasts moved. The children were also provided with minibeast spotter guides and information books to identify the minibeasts they were looking at.



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Enables pupils to zoom-in on minibeasts and view them moving and observe minute features.
- Allows pupils to see minibeasts as a group and see much more detail, instead of using shared magnifying glasses.



**HINT...**

You can change the rate of zoom to display minute detail.

**SCHOOL / LOCAL AUTHORITY:**

St Philomena's Catholic Primary School  
London Borough of Bromley

**SUBJECT:** Science

**AREA OF LEARNING:**

Knowledge and Understanding of the World

**YEAR GROUP:** Reception / Primary 1

**LESSON APPLICATION**

To identify the various stages in the lifecycle of a frog.

**HOW THE VISUALISER WAS USED**

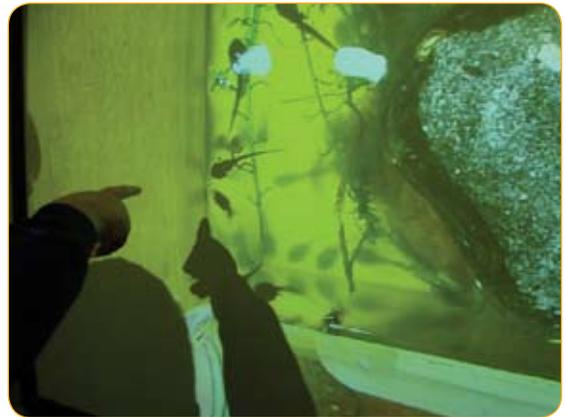
The small fish tank containing the tadpoles was placed under the visualiser, and the arm of the visualiser was bent over and turned towards the corner of the tank.

The appearance of the tadpoles was highlighted and compared with how they looked before half-term. The zoom button on the visualiser was used to try to allow the children to see the froglet which had developed front and rear legs. We tried to encourage the froglet onto the rock in the tank so that the children could see how the froglet now moved.

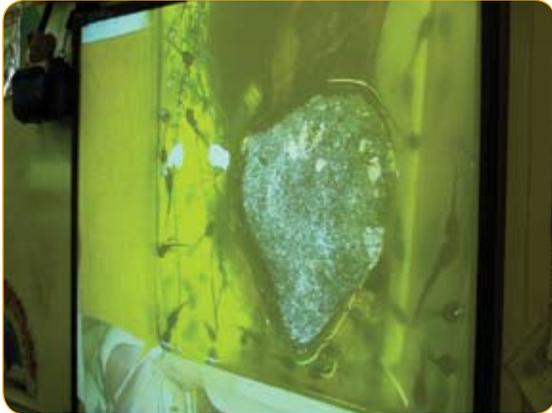
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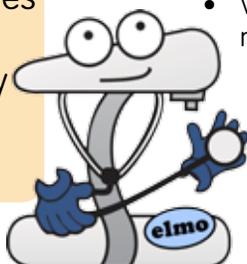


4.



**TIP...**

Use the visualiser's moveable arm to get close up with the tadpoles - then make use of the zoom function to display parts of the tadpole to the whole class!



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Pupils are able to share the excitement of seeing the changes as the tadpoles developed into frogs.
- Views are much clearer than when using small magnifying glasses.

**SCHOOL / LOCAL AUTHORITY:**

Wellesbourne C of E Primary School  
Warwickshire County Council

**SUBJECT:** Design and Technology

**AREA OF LEARNING:**

Scientific and Technological Understanding

**YEAR GROUP:** Year 4 / Primary 5

**LESSON APPLICATION**

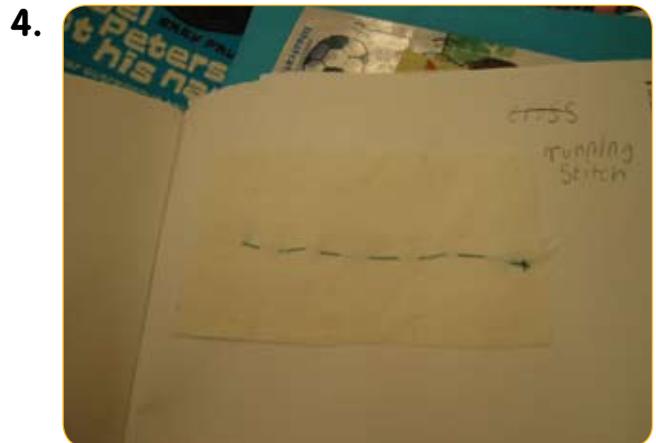
Focused practical task – to be able to sew running stitch and overstitch.

**HOW THE VISUALISER WAS USED**

The visualiser was used to demonstrate how to sew a variety of stitches. First of all, the teacher shared how to thread a needle and then to create a particular stitch. Pupils were encouraged to come to the visualiser and have a try at both techniques.

All pupils were able to see the demonstration without the need to crowd around a single needle and thread. Once the demonstration had been completed the teacher and teaching assistant then spent time with individuals requiring additional support.

During the plenary, pupils came to the visualiser to share the outcomes of their work and to check for inaccuracies. The quality of the work was very good, aided by the visualiser.



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Allowed us to demonstrate to everyone concurrently - rather than having to do it in small groups.
- Enables more time to be spent on those who require additional support.

**TIP...**

Let a group of children use the visualiser to demonstrate techniques to each other – allowing them to be the teacher and check for understanding. Oh, and use the visualiser to help when threading needles – it's a doddle!



**SCHOOL / LOCAL AUTHORITY:**

Mulbarton Infants School  
Norfolk

**SUBJECT:** Music

**AREA OF LEARNING:** Understanding the Arts

**YEAR GROUP:** Year 2 / Primary 3

**LESSON APPLICATION**

To develop children's singing ability and enjoyment in music.

**HOW THE VISUALISER WAS USED**

The visualiser was used to project the notes and the words of songs onto the screen in the hall for singing lessons for the school choir. The children were able to follow the words and teacher's finger followed under to help them keep their place. This increased pupil engagement and the children then performed in a singing assembly to the rest of the school.

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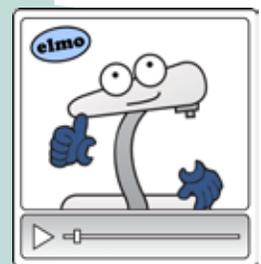


**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Teacher was able to introduce musical notation as well as the words of the songs.
- Teacher was able to indicate exactly where music was, and easily point out any complicated parts of chorus etc.
- Teacher's time is saved not having to type words into a document, with the ability to use published materials straight away.

**HINT...**

No need to convert existing hymns or songs into PowerPoint presentations for assemblies - just use your existing sheets!



**SCHOOL / LOCAL AUTHORITY:**

Sheen Mount Primary School  
London Borough of Richmond-upon-Thames

**SUBJECT:** Mathematics

**AREA OF LEARNING:** Mathematical Understanding

**YEAR GROUP:** Year 1 / Primary 2

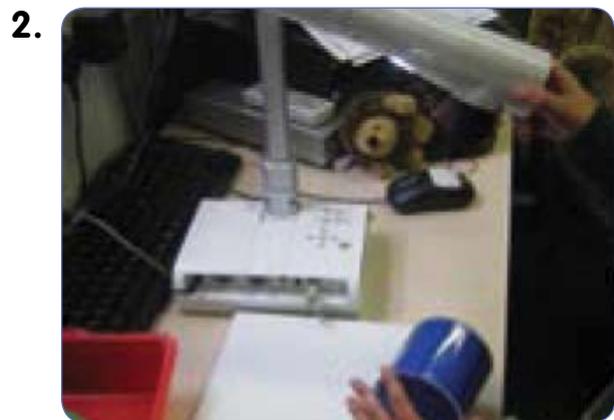
**LESSON APPLICATION**

To become more familiar with the properties of 3D shapes.

To be able to compare the properties of 3D shapes.

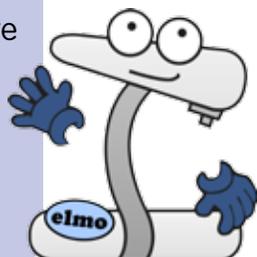
**HOW THE VISUALISER WAS USED**

The visualiser was used by the children to investigate the properties of 3D shapes. The children were able to look at the specific properties e.g faces, edges, vertices in order to identify how many there were of each on the selected 3D shape. The children were positioned by the computer so they could see where they were pointing to in greater detail on the computer screen. They were then able to compare the properties of different 3D shapes and make comparisons.



**HINT...**

Use the shooting stage to provide a white background against which to display the shape. Thus, making it easier to distinguish different features.



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Provides first hand experience by using the visualiser to zoom-in on specific properties of shapes.
- Allows pupils to recognise edges, faces and vertices with ease.

# A View From Across The Atlantic

## Visualisers in the USA

**Karina Clemmons Ed. D.**

Assistant Professor in the Teacher Education Department at the University of Arkansas at Little Rock

### Who is Karina Clemmons?

Karina Clemmons is currently an Assistant Professor in the Teacher Education Department at the University of Arkansas at Little Rock. Prior to joining the Teacher Education faculty she taught teacher preparation courses at the University of Central Florida, and also has extensive experience in the U.S. and in other countries teaching English Language Arts ESOL in diverse settings including middle school, high school, and adult programmes.



### Why had schools decided to use document cameras?

Schools have decided to integrate visualisers as an essential component of instructional technology with greater frequency because visualisers are far superior to past technology, allowing an educator and students to truly integrate a variety of visual instruction into many diverse lessons.

### How were visualisers impacting on teaching and learning in the US?

Visualisers are a huge improvement over past visual technology, such as overhead projectors, because they offer much more flexibility for teachers and students to display a broad range of authentic materials. Instead of only being able to use two-dimensional material on special transparent surfaces, a teacher and students are now only limited by their imaginations as to what they can make visually accessible for the class. As visualiser technology becomes more recognised and more available, the technology will only continue to transform US classrooms.



## USA

*Visualisers in the USA are referred to as Document Cameras!*

**LESSON APPLICATION**

Learning to compare and contrast requires high-level cognitive analysis. Comparing and contrasting is a skill used in many different disciplines at all levels of education. ELMO document camera can help students practice using different graphic organisers collaboratively before being asked to use them independently.

**MATERIALS**

- Document Camera
- Projector
- Whiteboard or large sheets of paper for students to write on
- A drawing of a graphic organiser used for comparing and contrasting, such as a Venn diagram, bubble map, or a T-chart.

**PROCEDURE****Before**

- Decide the compare and contrast topic to assign students.
- Prepare a drawing of a graphic organiser to be practised, such as a Venn diagram.

**During**

- Project the compare and contrast diagram using the ELMO document camera.
- Call students to the board to complete different areas of the compare and contrast diagram.
- Discuss notes as a class, changing and adding as necessary.
- Have all students copy the collaboratively designed notes.

**After**

- After creating notes together as a class, assign an independent project as an essay that discusses the topic in depth.
- Choose a different compare/contrast method of organisation to demonstrate to students each day for several days.

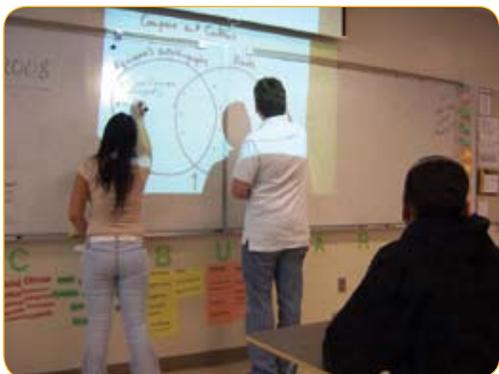
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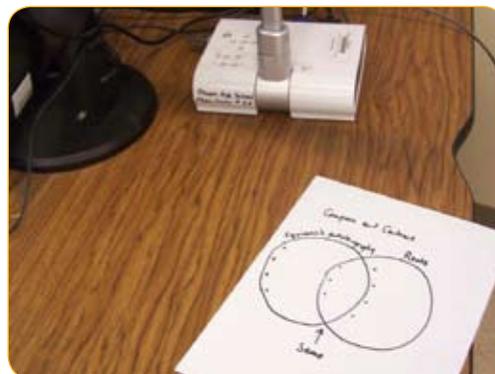
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**ADAPTATIONS**

- Assign a compare and contrast topic and a method of organisation. Allow students to work collaboratively or independently to complete notes. To review the topic and check for accuracy, choose student products to project with an ELMO document camera.
- Allow students to choose how they will organise notes for a graphic organiser. After students have completed their notes, show the class different ideas by projecting student samples using an ELMO document camera.

**SCHOOL / LOCAL AUTHORITY:**

Wellesbourne Primary School  
Warkwickshire County Council

**SUBJECT:** Mathematics

**AREA OF LEARNING:** Mathematical Understanding

**YEAR GROUP:** Year 6 / Primary 7

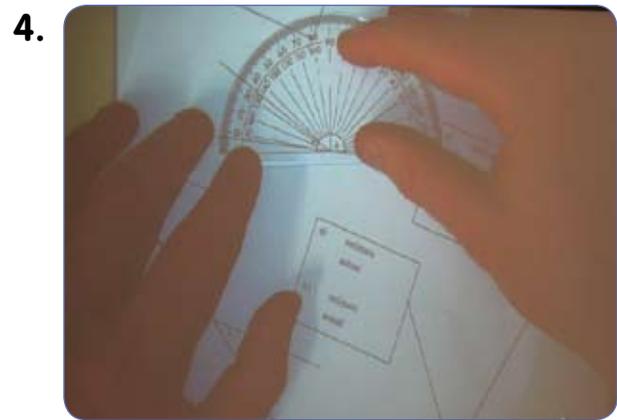
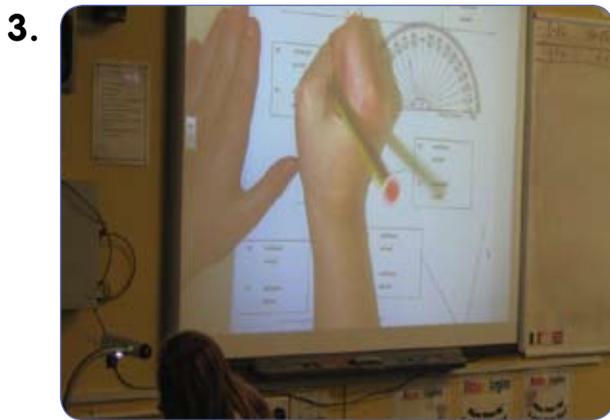
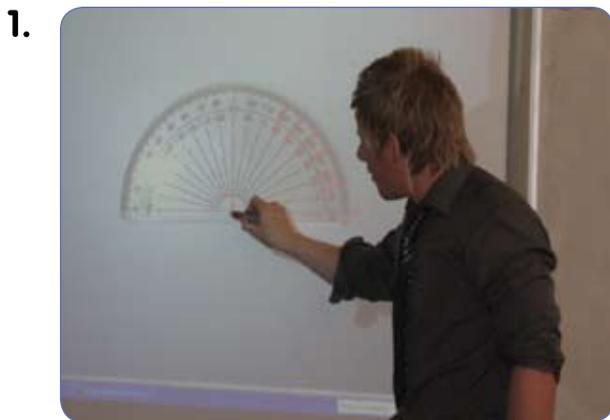
**LESSON APPLICATION**

Be able to use a protractor accurately to measure angles.

**HOW THE VISUALISER WAS USED**

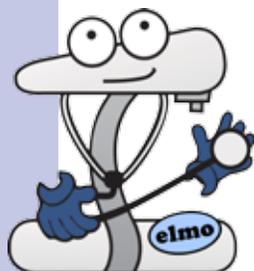
The visualiser was used to demonstrate how to use a protractor to measure a variety of angles. Children were shown clearly where to place the protractor, where to look on the scales and the teacher was able to demonstrate from his point of view how to use the protractor. The class (as a whole) were then able to have a go themselves and watch the technique on the screen.

Pupils then had the opportunity to tackle a variety of angles measuring problems and during the plenary the outcomes were measured to check for accuracy.



**HINT...**

Use the same protractor that the pupils have on their own desks - rather than a simulated electronic version.



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Detailed points on the protractor are clear.
- Actual protractor demonstration is better than a simulated electronic version.
- Easy to show misconceptions and common errors.

**SCHOOL / LOCAL AUTHORITY:**

Dundonald Primary School  
London Borough of Merton

**SUBJECT:** Design and Technology

**AREA OF LEARNING:**

Scientific and Technological Understanding

**YEAR GROUP:** Year 3 / Primary 4

**LESSON APPLICATION**

To name the main parts of a moving vehicle.  
To measure, cut and glue materials safely and accurately.

**HOW THE VISUALISER WAS USED**

The visualiser was used to demonstrate the following steps in the making of a moving vehicle.

**Step 1** – Measuring and marking off the wooden dowel for axle and square end jelutong wood for chassis using a template, ruler and pencil.

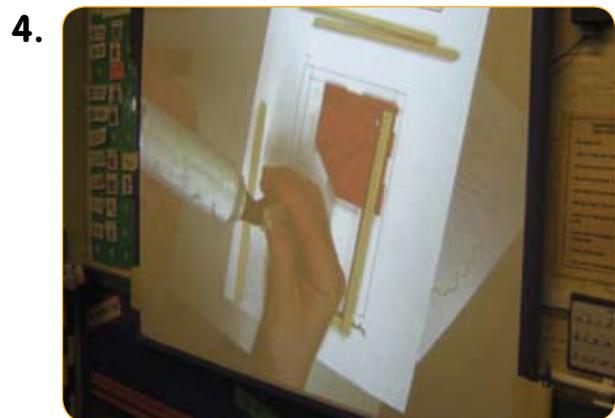
**Step 2** – Sawing wood for chassis and axle using craft saw, sawing block and clamp.

**Step 3** – Gluing chassis together using glue gun and corner joining frame.

**Step 4** – Sticking on triangular axle supports using glue gun.

**Step 5** – Attaching wooden wheels to axle.

Pupils understanding was checked throughout – by sharing their models under the visualiser.



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Focus is on the demonstration with the elimination of crowding and associated management issues.
- Promotes safe handling of tools.

**TIP...**

Alternate the position of the camera head to allow for plan and side views in order to capture the key skills being demonstrated.



**SCHOOL / LOCAL AUTHORITY:**

Wellesbourne Primary School  
Warkwickshire County Council

**SUBJECT:** Literacy

**AREA OF LEARNING:**

Understanding English, Communication and Languages

**YEAR GROUP:** Year 6 / Primary 7

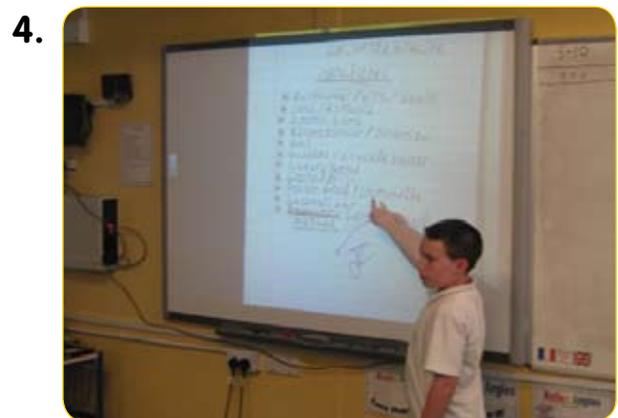
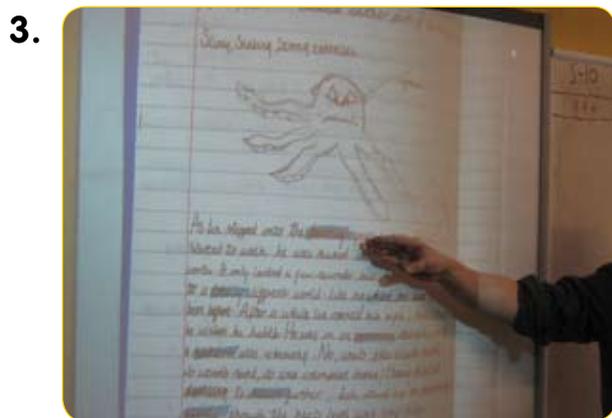
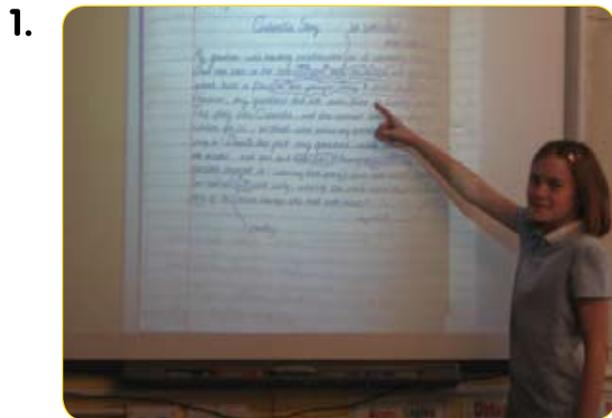
**LESSON APPLICATION**

Edit and refine a piece of writing.

**HOW THE VISUALISER WAS USED**

The teacher gave a clear demonstration of how to improve a piece of work using a highlighter and pen. A piece of writing from a literacy book was placed under the visualiser. The editing process was demonstrated clearly. Focusing on vocabulary, connectives, openers and punctuation.

Pupils were able to come to the front of the class to demonstrate their understanding of parts of a sentence and share effective vocabulary and connectives.



**HINT...**

Use the built-in light to illuminate a piece of text so that it can be more easily seen by pupils.



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Share an 'actual' piece of work on the board immediately for all pupils to see.
- Demonstrate the highlighting process to the whole-class at the same time.
- Pupils are able to come to the board to show the rest of the class what they have understood and outcomes of work.

**SCHOOL / LOCAL AUTHORITY:**

St Mary's Catholic Primary School  
Penzance, Cornwall

**SUBJECT:** History

**AREA OF LEARNING:**

Historical, Geographical and Social Understanding

**YEAR GROUP:** Year 5 / Primary 6

**LESSON APPLICATION**

To learn about changes that have occurred in Britain since 1948 and some of the reasons for these changes.

**HOW THE VISUALISER WAS USED**

The visualiser was used to look at artefacts from 1945 onwards. This lesson was a 'show and tell' session. The children discussed the artefacts and had to place the objects on a timeline. We continued the lesson by looking at a diary extract from a child's grandfather.

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2.



3.



4.



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Share artefacts and other historical sources with the whole-class.
- Allows delicate documents to be shared without the need for photocopying - thus ensuring pupils see the original source, not a grainy reproduction.

**TIP...**

Freeze the image and then pass the artefact around the class - allowing pupils to see the artefact first hand, whilst discussing the image captured on the visualiser as a group.



**SCHOOL / LOCAL AUTHORITY:**

St Joseph's Catholic Primary School  
Royal Borough of Kingston-upon-Thames

**SUBJECT:** Science

**AREA OF LEARNING:**

Scientific and Technological Understanding

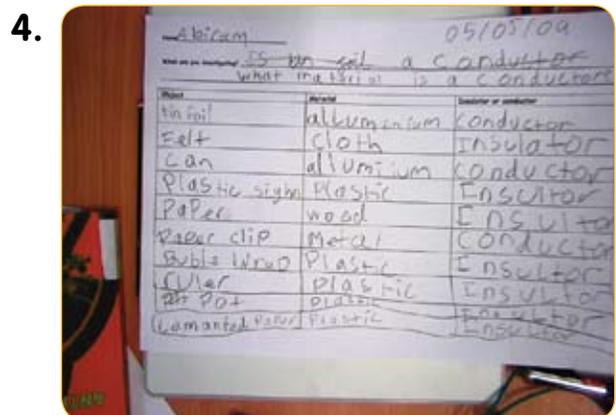
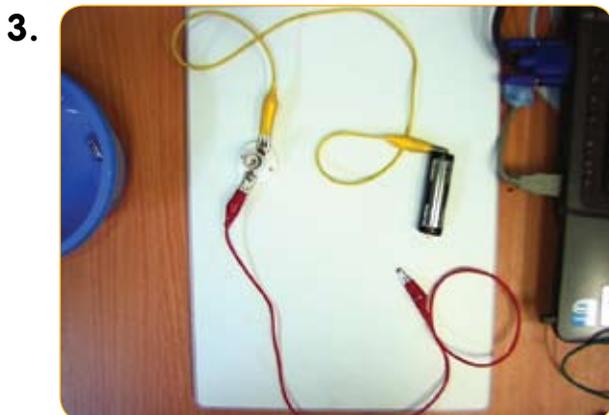
**YEAR GROUP:** Year 4 / Primary 5

**LESSON APPLICATION**

To find out about which materials conduct electricity.

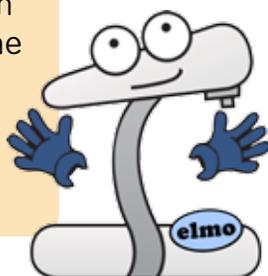
**HOW THE VISUALISER WAS USED**

The visualiser was used to show children how to connect a circuit together. The children used the visualiser to solve circuit problems (when not complete, or when had two batteries with one battery facing in the wrong direction, or when crocodile clips connected to plastic on bulb holder, how to make bulb light brighter etc). Children had to discuss how to test certain materials and one child demonstrated how to connect the circuit. During the plenary the visualiser was used by the children to share their results using the chart they had completed and to draw conclusions.



**TIP...**

Why use a simulation when you can use the real thing? Use real circuit parts - the same as the ones used by the pupils.



**THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:**

- Examine small objects clearly without crowding around a table.
- Manipulate real objects rather than clipart on the interactive whiteboard.
- Able to show work instantaneously rather than having it scanned and shown next lesson.



## PUPILS' VOICES

### LISTENING TO CHILDREN

This page contains comments from children at Fairhaven CE VA Primary School, Norfolk, showing their views on the visualiser and its benefits to their learning.

'It helps us see examples of work'

'...easy to use and the whole class can use it!'

'It's fun to see the small things that people have brought in made larger'

'...helpful because we can see other people's work and how they have made it better'

'We can see tiny pictures and pieces of writing'

'We can pick out other people mistakes'

'...makes things bigger when they are small'

'We can see what others have done and it gives us an idea of what we can do!'

'It is great to put the pictures onto an interactive whiteboard software so we can scribble on the work!'

'...gives you an extra pair of eyes in the classroom'

'It is excellent for improving our work'

'We can take photos and add notes so we know what to improve'

'You didn't need to pass the items around'

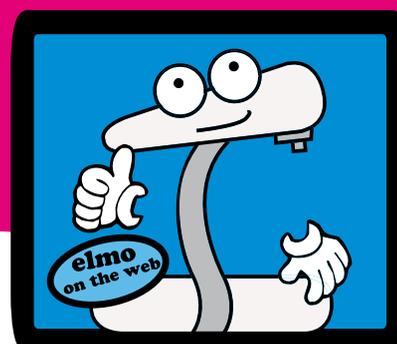
'You could clearly see what the teacher was talking about'

'You can look at things more closely'

Did you know that you can share your lesson ideas with teachers across the world... and you may win a visualiser for your school! Just go to our website at:

[www.elmoeurope.com](http://www.elmoeurope.com)

and follow the instructions in the Lesson Ideas section, entering the promotional code **EV0909**.





Above all, the L-1ex continues the ELMO tradition of providing teachers with easy to use tools to create inspiring lessons, save preparation time, and help to improve learning as lessons become more enjoyable!

## October 2009 will see the release of ELMO's new visualiser model, the **L-1ex**.

Packed with new features to help teachers create attention grabbing lessons, the L-1ex continues to show ELMO leading the field with advanced yet affordable visualisers.

The L-1ex offers even more flexibility with the addition of **Remote Control**, freeing the teacher to move around the classroom or assembly hall while using the visualiser. This simple to use device controls the new **Highlight & Mask** and **PinP** (Picture-in-Picture) functions. Both functions are simple to use yet add immensely to the flexibility of the visualiser, helping to make lessons more interesting, and saving lesson preparation time.

The L-1ex now **captures images at 30fps\*** for smooth moving images, so that it now appears to human eyes as "normal video".

Improved **digital camera compatibility** allows for greater use of the built-in SD Card reader, which now supports SDHC format, for storing and displaying digital images from complete lesson plans, pictures of lesson-aids to photos / scans of children's work.

Equipped with both 5.2x optical zoom and 8x digital zoom, **the L-1ex offers up to 41.6x magnification**. Combined with Elmo's advanced imaging technologies, pictures are crisp with natural colours - even after being enlarged.

The L-1ex also keeps the popular features found in previous models, including the **large image capture area**, allowing large items such as musical instruments and maps to be shown at up to **a full A3 spread**.

**Free-Angle Camera Head & Arm** allowing the camera to be easily moved to the best position so objects to be viewed from just about any angle - and it will remain there without camera-shake.

**Easy connection** to a range of input & output devices including microscopes, PC, projector, digital TV or interactive whiteboard.



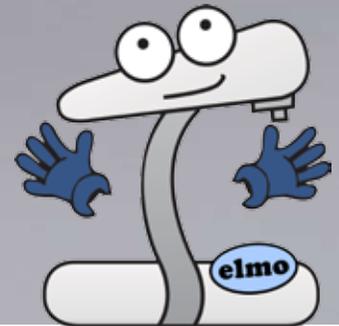
Remote Control from up to 7 metres



# L-1ex

Teacher's + Choice

# EXCLUSIVE 1ST LOOK AT ELMO'S NEW VISUALISER THE **L-1ex**



## NEW TO THE L-1EX

### 30fps Full Motion for smooth moving images

The standard PAL (UK standard) TV system runs at 25fps (frame per second). If the fps number is above 25, human eyes recognise it as "normal video".

The L-1ex can capture images at a maximum of 30fps, making moving images extremely natural.



Capture lively movements.

The zoom dial and one-push Auto Focus button make the zoom operation simple.



### **PinP (Picture-in-Picture)**

A still image can be displayed in a small picture while displaying a live image.

Demonstrate how to make things step-by-step.

### Remote Control allows the teacher to move around the classroom while controlling the visualiser

This ergonomic, simple to use remote control and its unique design of infrared receiver will operate from up to 7 metres, enabling you to control the L-1ex from anywhere in the classroom.



### **Highlight &** **Mask**

#### Highlight



Important points can be emphasized.

#### Mask



Specific areas can be hidden using the screenshade.

#### Still Image



## DEAR ELMO

Frequently Asked Questions



### DEAR ELMO

I've installed the Elmo software but when I open the application I receive the following error message: 'unable to find the 'main unit'.

Best Regards,  
Bill Milligan  
Towers Junior School  
London Borough of Havering

### ELMO SAYS...

Try uninstalling and reinstalling Image Mate software but ensure the USB cable is disconnected. When the installation is complete, reconnect the visualiser to the PC with the USB cable.

### DEAR ELMO

What's the best way to ensure maximum detail when viewing minute objects?

Thanks for your help,  
Tom Whitehead  
St Luke's C.E Primary  
London Borough of Tower Hamlets

### ELMO SAYS...

Try bringing the camera lens closer to the object being studied - and use optical zoom rather than digital zoom. This will help maintain image quality and detail.

### DEAR ELMO

I'm struggling to read text in a brightly lit classroom. Any ideas welcomed...

Caroline Gollidge  
Churchend Primary School  
Reading

### ELMO SAYS...

Try going into the on screen menu, select 'Mode' and the 'Text 3'. This should increase the contrast enabling a clearer view of monochrome documents. Don't forget to reset the mode to 'Graphics' for coloured material and objects.



If you have any questions or suggestions for ELMO, please visit our website at [www.elmoeurope.com](http://www.elmoeurope.com)

### DEAR ELMO

What's the best way to flip the image up the right way when looking at objects in the distance? Can you help please?

Teresa Carter  
Parklands Junior School  
London Borough of Havering

### ELMO SAYS...

You can always access the 'Image Rotation' option through the on-screen menu, but better still, rotate the camera arm through 180 degrees and twist the camera head around to face your subject. The image will now be in the correct orientation.

# CONNECTING AND SETTING-UP The ELMO L-1n visualiser

## HOW TO CONNECT THE VISUALISER

The visualiser supports better understanding in the classroom, but it cannot work on its own. We would like to show you how to ensure you maximise its potential.

## VISUALISER AND ITS BEST FRIEND

### • A visualiser + a projector

A projector is the best partner for the visualiser to ensure bright and enlarged images. There are 2 ways of connecting the visualiser and projector.

1. **Using the RGB Cable** - When the connecting lead shape is as shown in image (1.1), the RGB cable should be used. It is used for connecting the PC to the projector. It is a trapezium shape. It is important that the cable ends are the correct way up (image 1.2). Do not force them.

### 2. A visualiser, projector, PC and whiteboard

Load the software onto your classroom PC (picture 1.3). Once installation is complete, connect the USB cable from the visualiser to the PC (picture 1.4). Open the visualiser software (ImageMate) followed by your whiteboard software then bring up its 'floating toolbar' on the screen. You can even control the visualiser remotely from the whiteboard (picture 1.5).

## Extra Tips!

- Focusing should be done with a projector first. Turn it on and ensure a clear focus on the logo displayed.
- Please pay attention to safety. If the cable(s) are too long tie them up.
- It is a good idea to mark the equipment and cables for easy set-up. It also helps to prevent loss or theft.

1.1



1.2



1.3



1.4



1.5



For more information on connecting and using ELMO visualisers please visit: [www.elmo-visualiser.co.uk](http://www.elmo-visualiser.co.uk)

## ACKNOWLEDGEMENTS

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## ELMO IN EDUCATION

Since 1921 Japan's ELMO Co., Ltd. has focused on the future of imaging technologies, with special emphasis on how they can be used to improve learning in the classroom.

At ELMO we strive to deliver innovative, affordable products that result in obvious benefits to our customers and the wider community. ELMO is now acknowledged as a leading innovator and supplier of visualisers to the education market across the globe.



ELMO Co., Ltd. is a member of Japan Committee "Vaccines for the World's Children" (JCV), helping to immunise the world's children.

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Designed & Printed By  
A M Design & Print Ltd at [printing.com](http://www.printing.com) Cardiff

Published by ELMO Company, Ltd.  
Crown House, 72 Hammersmith Road, London W14 8TH.  
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