ELMO

# Visualiser

HINTS AND TIPS ACROSS THE CURRICULUM

PACKED WITH USEFUL TIPS
TO MAKE LESSONS MORE INTERESTING AND ENJOYABLE

SPECIAL FOCUS ON

## Using visualisers with interactive whiteboards

## "In the USA we call them document cameras"

Ken Royal - Instructional Technology Specialist and the Director of 'Educator's Royal Treatment' website explores the visualiser revolution in US classrooms

## VISUALISERS PROVE A HIT WITH CITY LEARNING CENTRES

ISSUE 2

ELMO UK

# What is a visualiser?

- Visualisers are digital teaching aids that 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!

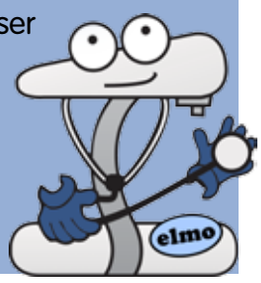
- To the teacher, a visualiser is a flexible teaching aid that will allow them to display just about anything from a single-cell amoeba to a piano in glorious colour, still or moving, easily and quickly

- It is also a time and money saving tool that reduces the amount of lesson preparation activity, such as copying and 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 pupils 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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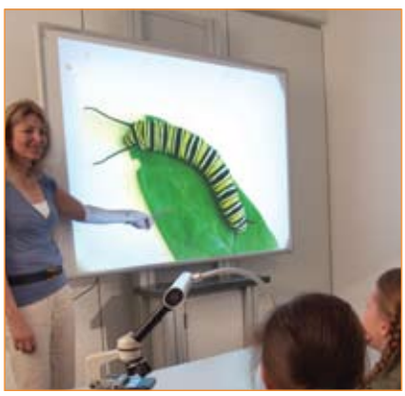
# HOW TO USE AND BENEFIT FROM VISUALISERS

## INTERACTIVE WHITEBOARD AND ZOOM FEATURES


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

Chair of The Visualiser Forum



## THE VISUALISER AND THE INTERACTIVE WHITEBOARD - A PRODUCTIVE PARTNERSHIP FOR LEARNING

In this magazine we examine the way in which visualisers can be used in conjunction with interactive whiteboards, to make learning more engaging. Explore real-life examples of classroom practice submitted by teachers, you will see the impact of visualisers to support learning and teaching.

Even the least ICT confident teachers are drawn to the power of the visualiser and are then eager to explore how the tools of the interactive whiteboard can be used to annotate over images displayed underneath. The simplicity with which you can pick-up an interactive whiteboard pen and start to annotate over an image captured by the visualiser is impressive. Pupils enjoy sharing their work under the visualiser and then put the 'interactive' back into 'whiteboard' by annotating or highlighting key features of a text or working to uplevel their own work.

The screenshade and spotlight tools add another dimension to learning. Display a text or image and then reveal it slowly allowing a build-up of tension and suspense as pupils wait to see what is coming next. The spotlight tool allows teachers and pupils to focus on specific aspects, such as examining an artist's work and exploring the detail up close.

## 4 INNOVATIVE REASONS TO USE A VISUALISER WITH AN INTERACTIVE WHITEBOARD>>

### 1. UPLEVEL PUPILS' WORK USING ANNOTATION AND HIGHLIGHTER TOOLS

Allow pupils to share their work instantly under the visualiser and then use annotation tools to underline aspects for improvement. Also, highlight where key objectives have been met in a piece of work.

### 2. ANNOTATE REAL-LIFE OBJECTS QUICKLY

Pick-up the interactive whiteboard pen or the built-in visualiser annotation tools to immediately annotate 'real-life' artefacts or documents. Why not add the hands on a clockface or lines of symmetry to a shape? It is so easy!


Dave Smith

### 3. IMPROVE PUPILS' CONCENTRATION BY USING THE SCREEN SHADE FUNCTION

Focus on particular areas by using the visualiser camera feature to display a whole-text or image and then reveal it slowly, allowing pupils to concentrate on specific aspects – reducing pupil distraction.

### 4. FOCUS ON ASPECTS OF A DOCUMENT OR ARTEFACT USING THE SPOTLIGHT TOOL

Hone-in on a key element of an artefact or object displayed under the visualiser. Examine a number square and just focus on a selection of squares or look at the reproductive parts of a plant.

NB. The Elmo L-1ex visualiser now has a screenshade as a built-in feature.

member of Visualiser forum

Havering LONDON BOROUGH

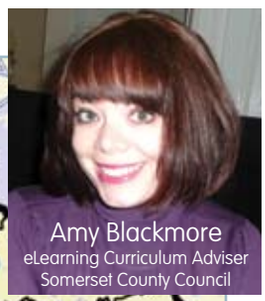
ICT EXCELLENCE AWARDS 2009 WINNER NEXT GENERATION LEARNING

## VISUALISERS IN SOMERSET SCHOOLS - real life, real learning, real experiences

Over the last ten years, many of our classrooms have been transformed into temples of technology – but how much of the learning that takes place with that technology is about real experiences and hands-on activity?

In Somerset, our teachers love the fact that visualisers allow pupils to make connections between what they can see and what they can do – no more wobbly writing on the whiteboard. Write on real paper instead; stop those simulations of making an electrical circuit and use real batteries, real wires, and real fingers to join them up. Pupils can be at the heart of the learning, talking to one another about what they are doing rather than having to translate an abstract experience on a whiteboard into one that they can understand.

It is not too extravagant to say that when used effectively and with training, guidance and support, visualisers can transform the way teachers teach and pupils learn. Now how many tools in your classroom can you say that about?



Amy Blackmore
eLearning Curriculum Adviser
Somerset County Council

SOMERSET County Council
Children and Young People's Directorate

www.six.somerset.gov.uk/curriculum

## LESSON IDEA 1

**SCHOOL / LOCAL AUTHORITY:**
Gascoigne Primary School
London Borough of Barking and Dagenham

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

**LESSON APPLICATION**
- To explore strategies for doubling numbers using Dienes' apparatus

**HOW THE VISUALISER WAS USED**
The visualiser was used to demonstrate that 'double' means adding the same number – making use of Dienes' apparatus to explain the concept. Pupils were encouraged to share their understanding by coming to the visualiser to add the correct number of Dienes' apparatus to show how a number is doubled.

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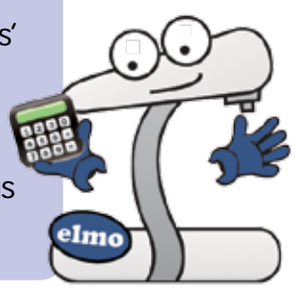
## HINT...

Model the use of Maths' equipment under the visualiser, allowing the pupils to practice with the same equipment as they have on their own desks.




## THE IMPACT OF THE VISUALISER ON TEACHING AND LEARNING:

- Pupils were able to clearly see the displayed Dienes' apparatus
- Pupils were able to demonstrate how to double number cubes, while the whole class observed the activity
- Pupils also developed their understanding of doubling multiples of 10

LESSON IDEA 2

**SCHOOL / LOCAL AUTHORITY:**
St Peter's Primary School
Salford

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

**LESSON APPLICATION**

- To build a character profile and write descriptive sentences
- To write an imaginative story on the theme of Pirates using a storyboard

**HOW THE VISUALISER WAS USED**

The visualiser was initially used to scan an image from a picture for the pupils to use as a visual stimulus to assist them when brainstorming ideas. It was later used by the pupils to share work, add descriptions to simple sentences, adapt work and show where changes could be made to make improvements. The visualiser was also used by the class teacher to make a simple storyboard for the pupils to use and discuss ideas for their stories. They were able to manipulate images from the visualiser on the interactive whiteboard to change the order based on their shared discussions before agreeing on a sequence to work from when composing sentences and writing stories.







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

- Pupils were more involved and able to make changes, add their ideas and make improvements together whilst displaying work for all to see
- The visualiser made lessons quicker and easier to prepare
- The visualiser made lessons more engaging and interactive due to the range of resources being able to be used and shared with the whole class
- Pupils' confidence improved as they took ownership of their work
- Pupils' skills regarding changing and improving their own work were enhanced. (examples of their work could be displayed and used to show how it could be improved)


### TIP...

Adjust the visualiser's zoom and spotlight tool functions to allow for close focus on the technique being demonstrated.

## LESSON IDEA 3

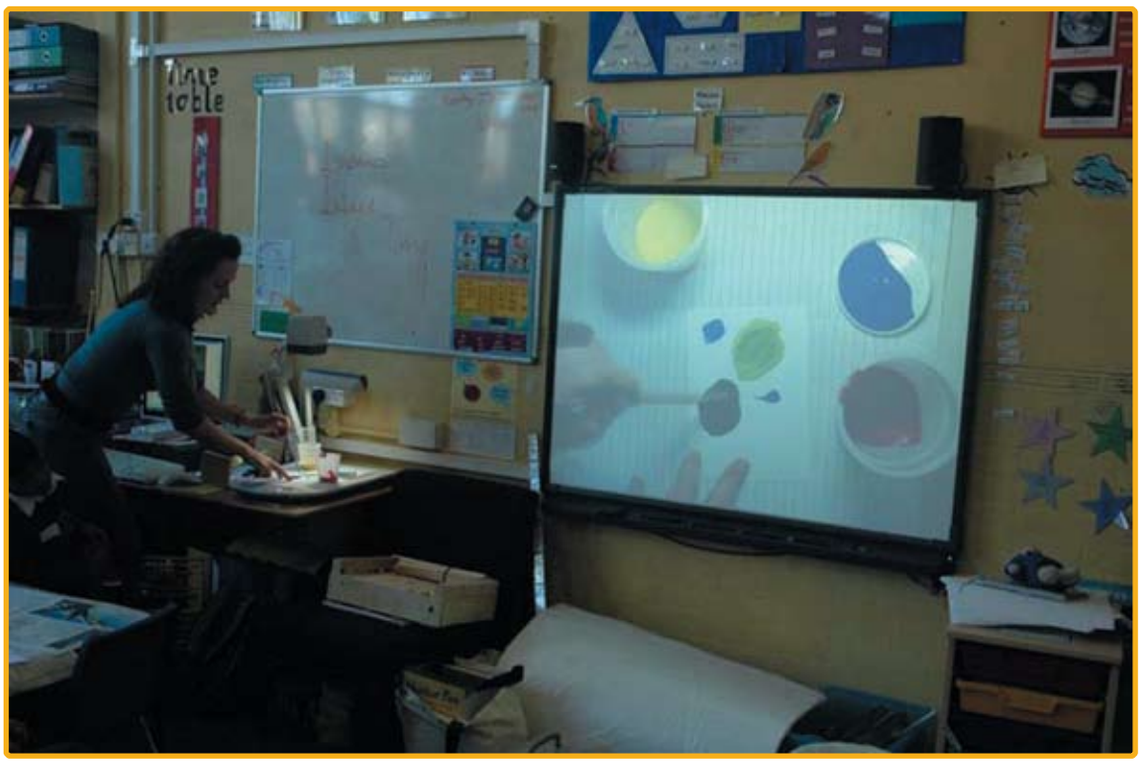
**SCHOOL / LOCAL AUTHORITY:**
Bonneville Primary School
London Borough of Lambeth

**SUBJECT:** Art and Design
**YEAR GROUP:** Year 2/Primary 3

**LESSON APPLICATION**
- To demonstrate colour mixing.

**HOW THE VISUALISER WAS USED**
To mix primary colours to make secondary colours.
To know what colours are made when two colours are mixed together.

**1.**




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

- The pupils were able to see an instant transformation through the medium of the colour-mixing process
- The demonstration was projected from the visualiser through to the interactive whiteboard, so that all the pupils could see at the same time, impacting on their ability to mix colours effectively


### TIP...
Adjust the visualiser's zoom and spotlight tool functions to allow for close focus on the technique being demonstrated.

**SCHOOL / LOCAL AUTHORITY:**
Heathbrook Primary School
London Borough of Lambeth

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

**LESSON APPLICATION**

- To understand that every material has many properties, which can be recognised using our senses and described using appropriate vocabulary
- To use words e.g. hard, shiny, and rough to describe materials and objects
- To understand that objects can be described using key words

**HOW THE VISUALISER WAS USED**

The pupils had first-hand experience of feeling the objects and then these and other objects were sorted into sets of hard, soft, rough, smooth and shiny objects. In the next lesson, objects from the previous lesson were put in a feely bag and the pupils were asked to identify the object based on the answer to their questions. e.g. Is it soft? Is it bendy? Prior to the session, objects were put on the visualiser and a still photograph of them was scanned into an interactive whiteboard file. The lesson itself was to record key words that could be used to describe these objects. During the session key words were written on the whiteboard, which were later replaced with computer text for use in a subsequent lesson.

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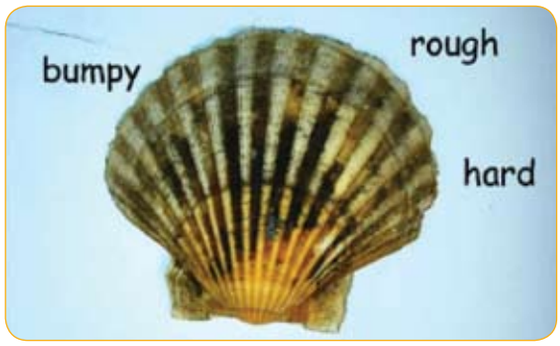


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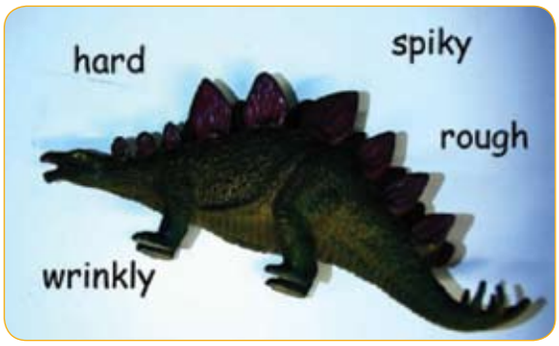


3.


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# HINT...


Use the visualiser in conjunction with the labelling tools within the interactive whiteboard. Pick-up a pen and annotate straight onto the interactive whiteboard. Then use the handwriting recognition feature to convert it to text.

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

**A view from the classroom, Margot Spear Heathbrook Primary School comments...** "An additional benefit was that it is simplicity itself to switch between the interactive whiteboard file and a live image on the visualiser. This enables one to zoom in on a smaller object to take a closer look at the texture. I previously taught this unit to Year 1 and felt that the children were more focused during this lesson than on previous occasions.
The children were keen to participate in discussion about the objects. I have a number of children in my class for whom English is their second language or who have speech and language difficulties. These children require visual resources to support their learning and using the visualiser has enabled me to easily produce appropriate resources to model the activity they will be asked to complete during a subsequent lesson. Whilst you can use the visualiser without an interactive whiteboard, its use with an interactive whiteboard and software adds an extra dimension and flexibility to lessons."

## LESSON IDEA 5

**SCHOOL / LOCAL AUTHORITY:**
Fairhaven CE VA Primary School
Norfolk

**SUBJECT:** Design and Technology
**YEAR GROUP:** Year 3/Primary 4

**LESSON APPLICATION**
To design and make the packaging for a brand new type of cereal.

**HOW THE VISUALISER WAS USED**
Many aspects of the visualiser and its software were used at numerous times throughout these two sessions in Design and Technology.

- The visualiser was used to look at a variety of different cereal boxes to identify the features needed on the pupils' designs. The arm was moved so the camera looked directly at the boxes rather than from above. The visualiser software was used at this stage to compare different coloured cereal boxes. It was also used in conjunction with the screen capture to transfer the photographs to the interactive whiteboard so that labels could be added.
- Once the pupils had recorded their initial ideas and designs, they could place their books underneath the visualiser, enabling them to make positive comments and highlight areas for improvement.
- Pupils proceeded to make their cereal boxes adding the features necessary and gluing the net together. Those cereal boxes that were completed could then be shown underneath the visualiser to enable pupils to make positive comments and highlight areas for improvement. The Image Mate for Presentation software was again used to end the lesson showing the live monitor and photographed examples to enable comparisons to be made between the pupils' versions and a commercial package.

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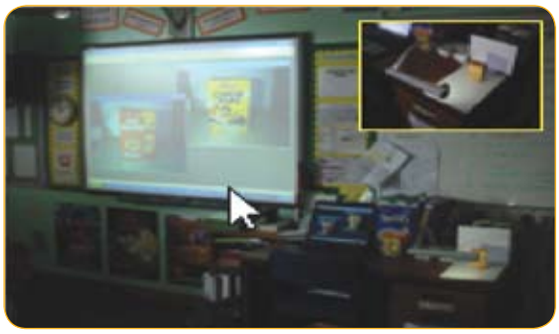

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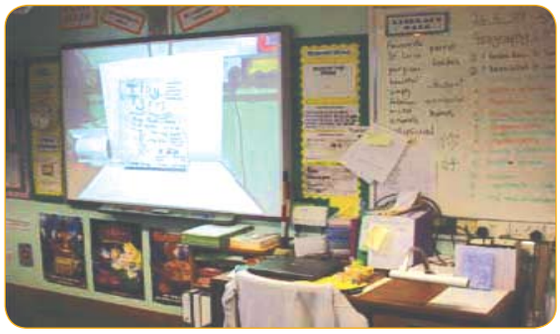

## HINT...

Use the software accompanying the visualiser to capture images of pupils work for electronic portfolios – store these on your Managed Learning Environment/Learning Platform as a record of pupils' work - eliminating even more paper!


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

- It allows the teacher to photograph pieces of work to keep as evidence and save onto the computer for future reference or assessment.
- It allows the whole class to view examples of work and to constructively comment on their peers' work through identifying improvement points.

**SCHOOL / LOCAL AUTHORITY:**
Parsonage Farm Primary School
London Borough of Havering

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

**LESSON APPLICATION**
To model calligram poems.

**HOW THE VISUALISER WAS USED**
The visualiser was used to show models of calligrams and the pupils came up and highlighted vocabulary they liked in a calligram about a Christmas tree. The teacher modelled how to write a calligram as shared writing and the children then shared their work in the plenary.

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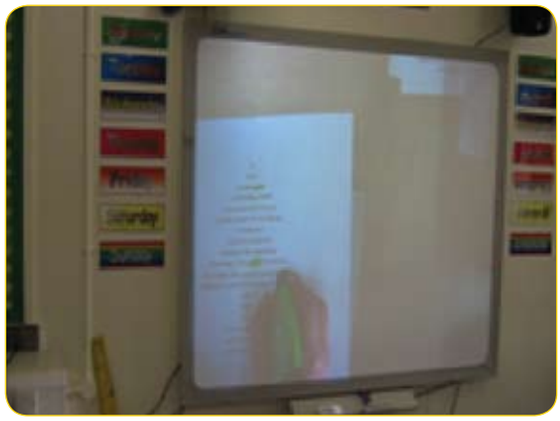

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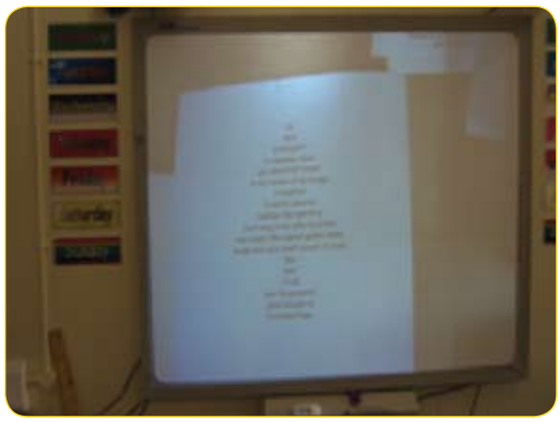

## THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:

- The pupils were able to share their ideas easily and the teacher could model the activity using the template the pupils would be using.


## TIP...

Capture the work to the interactive whiteboard and then create a new page for every stage in the modelling process – then toggle between pages to check the developmental stages.

# Dr. Chris Tisdell and ELMO :
## OpenCourseWare / YouTube Research Project

**Dr. Chris Tisdell**
Senior Lecturer in Applied Mathematics at UNSW, Sydney

ELMO

### *Dr. Chris Tisdell + ELMO : OpenCourseWare / YouTube Research Project*

Dr. Chris Tisdell is Senior Lecturer in Applied Mathematics at University of New South Wales (UNSW), Sydney, Australia. He is passionate about free and openly accessible education materials, known as OpenCourseWare (OCW). Recent technological advancements in document camera, video and internet technologies have created exciting opportunities for educators to significantly advance teaching and learning resources in the OCW environment.

In his new collaborative research project with ELMO, Dr. Tisdell is forming a set of OCW videos on undergraduate mathematics.

Dr. Tisdell is using visualisers to capture his OCW material. The presentation is recorded directly to a laptop computer as a movie file using the visualiser software. The raw file is then edited and produced on Adobe Premiere Elements and uploaded to UNSW's YouTube EDU webpage.


It is anticipated that the project's OCW videos will:

- add significant value to the existing learning and teaching experience of those studying (and teaching) mathematics
- increase mathematical knowledge worldwide
- provide a model demonstrating the value of openness in learning and teaching
- enhance the global awareness of participants.

The initial feedback on Dr Tisdell's OCW/YouTube initiative has been very encouraging and the students themselves view the materials as supplementary to the lectures - not replacing them.

Dr. Tisdell's other research interests include differential equations and dynamical systems. These equations are used in the modelling of phenomena that change over time. He has authored over fifty research articles in the field and serves on editorial boards of 3 international mathematics journals.



UNSW, Sydney: http://www.unsw.edu.au
UNSW eLearning Channel:
http:///www.youtube.com/user/UNSWelearning

**UNSW, Sydney: http://www.unsw.edu.au**

YouTube

## NEW ZEALAND

**SCHOOL:**
King's College, Auckland

**SUBJECT:** Science / Physics
**YEAR GROUP:** Year 9-Year 11

**LESSON APPLICATION**
- Be able to observe the paths of light rays and take measurements

**HOW THE VISUALISER WAS USED**
The visualiser was used to give students clear instruction in setting up their own ray boxes and perspex blocks. This created the opportunity to give the students greater focus on what they were doing. Once the students had made their own observations, a follow-up discussion took place where students had the opportunity to come to the front of the classroom to demonstrate what they had took.

Angles of incidence and refraction can be measured as a class activity, from which a refractive index can be determined. The critical angle can be predicted and then measured.

Applications of refraction can be observed and discussed.
e.g. vision correction by lenses.

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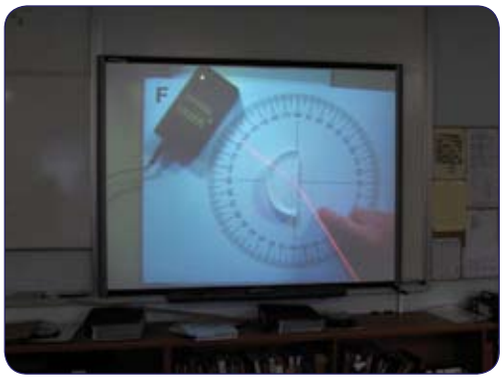

## THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:

- Instructions are given to students with greater clarity
- Rays clearly visible on the visualiser aid a focused class discussion
- Measurements can be easily taken as a class activity and phenomena can be observed and discussed


## HINT...

Use a laser ray box with the visualiser. Turn the brightness down to get a contrast that is clearly visible to the whole-class.

**SCHOOL / LOCAL AUTHORITY:**
The Mawney Primary School
London Borough of Havering

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

**LESSON APPLICATION**
- Sorting 2D shapes and identifying properties of shapes

**HOW THE VISUALISER WAS USED**
2D shapes were placed under the visualiser and displayed on the interactive whiteboard. The pupils used the visualiser software to draw on top of the shapes, identifying the properties of each shape. Groups of pupils were then able to sort the shapes on their table according to set criteria.

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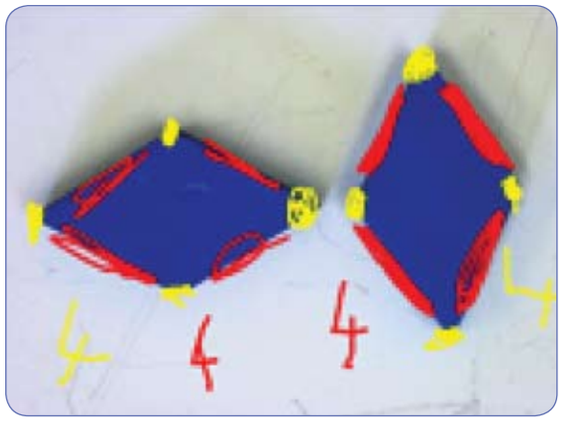

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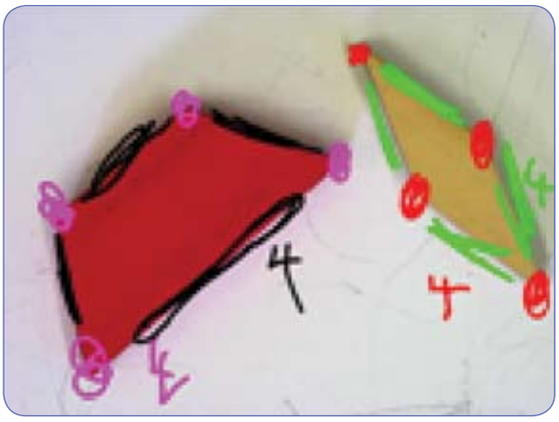

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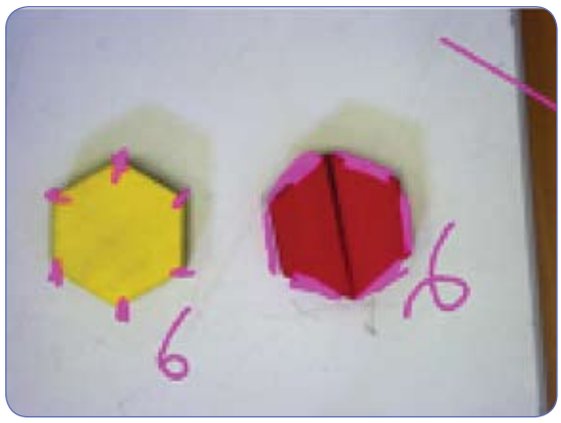

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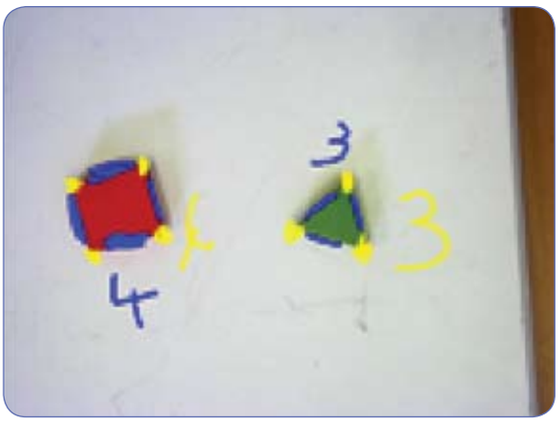
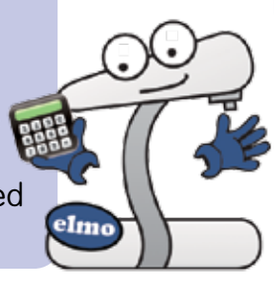


## TIP...

Use the visualiser's software or that within the interactive whiteboard to annotate the captured or live images.




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

- All pupils are able to access learning, catering for different learning styles
- Reinforces properties of shape in a fun and interactive way
- Allows the same resources as the pupils are sorting on their table, particularly useful for pupils with Special Educational Needs/English as an Additional Language

**SCHOOL / LOCAL AUTHORITY:**
Parsonage Farm Primary School
London Borough of Havering

**SUBJECT:** Design and Technology
**YEAR GROUP:** Year 3/Primary 4

**LESSON APPLICATION**
- To model the process of Egyptian bread making.

**HOW THE VISUALISER WAS USED**
The visualiser was used to demonstrate how to mix the ingredients together and how to add the water a little at a time. Pupils were shown how to knead the bread, then the pupils showed their bread designs underneath the visualiser to share their designs.

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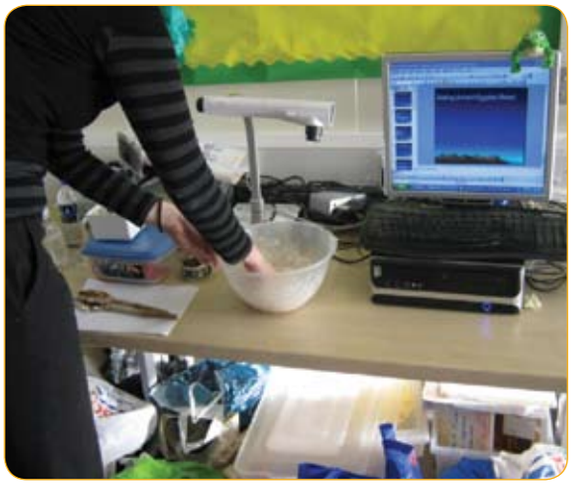

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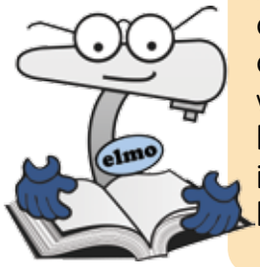
## THE IMPACT OF THE VISUALISER ON TEACHING & LEARNING:

- All the pupils were able to see the process clearly modelled on the whiteboard rather than having to crowd around a table or on the carpet – impacting positively on behaviour, allowing the focus to be on learning and teaching and not classroom management




## HINT...

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

LESSON IDEA 9

**SCHOOL / LOCAL AUTHORITY:**
St. Augustine's CE Primary School
Salford

**SUBJECT:** Literacy
**YEAR GROUP:** Nursery

**LESSON APPLICATION**
- To identify and name circles / to draw anti-clockwise circles

**HOW THE VISUALISER WAS USED**
- To initially get the children's attention by letting them view themselves
- To 'enlarge' a small shape book so that everyone could see clearly
- Children were invited to identify a circle and then 'draw round it' in an anticlockwise direction
- To 'enlarge' a small story book as above and identify the circles in the illustrations and text at the end of the session

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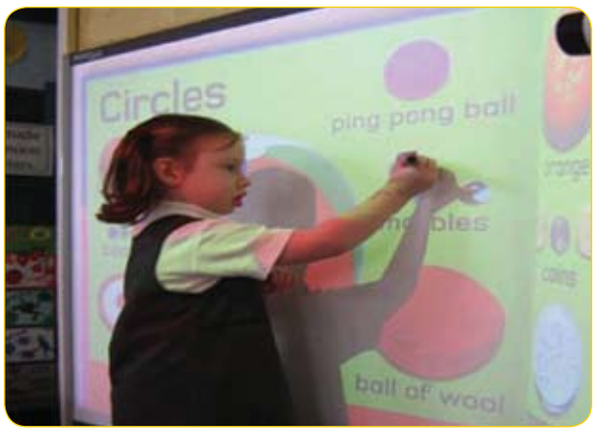


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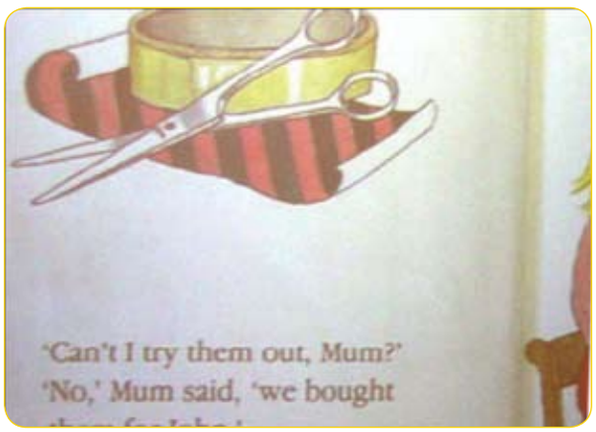



## TIP...

Annotation tools within the visualiser software enable pupils' work to be annotated, even if you only have a data projector and no interactive whiteboard.

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

- Made small books large ones!
- Enabled all children to share a similar view and therefore enabled whole class teaching and learning
- Captured the children's attention and therefore improved their participation in the lesson

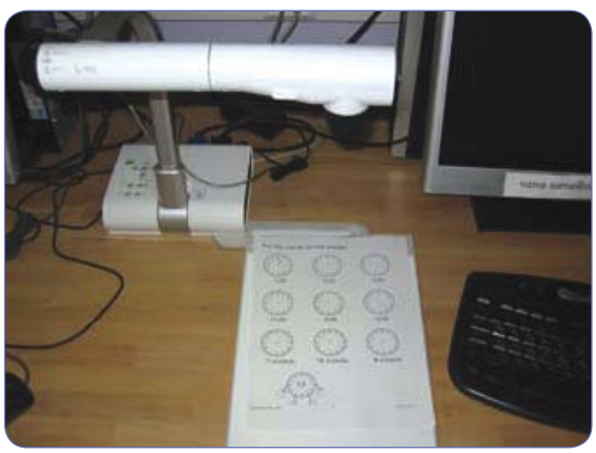
**SCHOOL / LOCAL AUTHORITY:**
Our Lady's Catholic Primary School
Warwickshire

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

**LESSON APPLICATION**
- To show the time on an analogue clock
- To show the hour, half past, quarter past and quarter to, with correctly positioned hands

**HOW THE VISUALISER WAS USED**
The visualiser was used to project a clock face from a worksheet the pupils were going to complete later that session. The pupils then used the interactive whiteboard pens to draw the hands on the clock for the given time. We were then able to capture this into the interactive whiteboard file and use this to discuss the correct position of the hands in subsequent sessions.

1.



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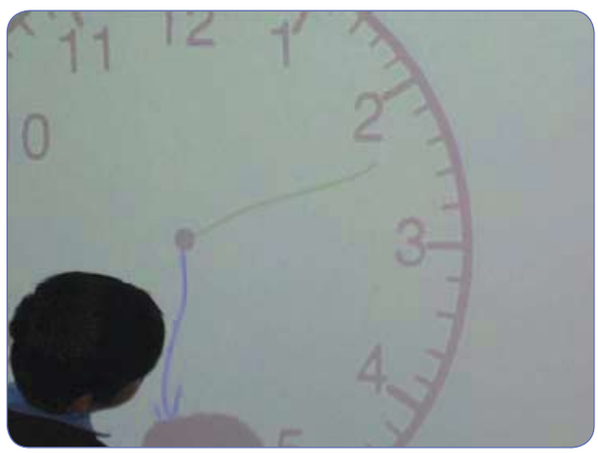

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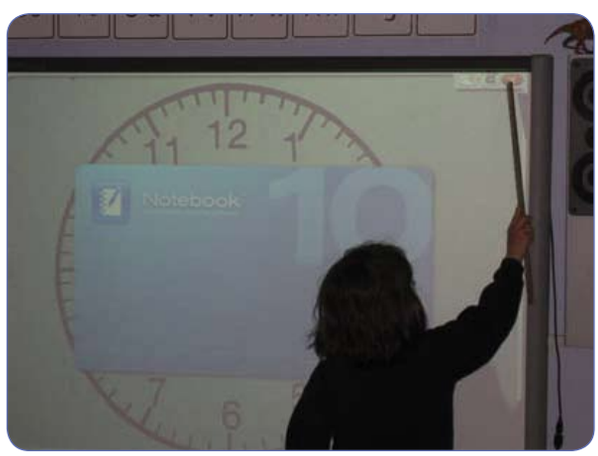



## THE BENEFITS OF THE VISUALISER TO TEACHING & LEARNING:

- Convert static resources such as worksheets into dynamic visual resources that can be shared effortlessly with pupils to aid their learning


## HINT...

It is important to adjust the visualiser's light source when laminated sheets are placed under it to avoid glare.

# IN THE USA WE CALL THEM DOCUMENT CAMERAS

BY KEN ROYAL

Using his 34 years of classroom experience, Ken is a renowned blogger and the technology Editor of Scholastic Administrator Magazine

### To Document

Sometimes a name says nothing about what an education solution does. This may be the case with the document camera, or visualiser. Most educators would assume that the device does something with documents. Today, to document should involve all documentation tools – imaging, videos, as well as print. Luckily, there is an easy-to-use tool that can do it all, but it may require a re-introduction.

### Learning Cycle

Recently, a young educator e-mailed that she hadn't a clue as to what a document camera/visualiser was, until she'd read one of my recent blog posts. Never forget there's a learning cycle necessary to get new educators up to speed. And beyond that, realise that even educators, who actually use document cameras /visualisers, may need a little recalibration. Today, document cameras/visualisers are not the overhead projector replacements they once were. I think of these interactive gems as multimedia projectors.

### "Here's lookin' at You Kid!"

New document cameras/visualisers need to be looked at in a different way. Sure, you can still put a student paper, or book under the camera, and project to a screen – but leaving it at that is such a waste of a very talented machine.

### Image Change

Most document cameras/visualisers have the ability to shoot and save images of everything from leaves to bugs – placed under the camera. By taking that a short step further, you can put those images into a slide show with just a button click. And by setting the image playback to its speediest creates a simple animation from a series of stills. Because the software is easy to use, teachers can annotate anything, including images – and best of all save it all for future playback.

### The Classroom Stage

Educators with video-capable document cameras /visualisers can look like technology wizards, with just a short bit of effort, simply do the same things with document camera/visualiser video, that worked with still images. It is a case of knowing one thing and building upon it – works for students and educators alike. Gaining the benefit of audio and video adds classroom value, and gets positive feedback. Any teacher can record a lesson for student review, online posting, or just building and sharing great lesson archives.

### Hey World, Here We Are!

Whether you are using still images, or doing video, turn that camera on your class. It is easy to record individuals, group work, labs, presentations, and even classroom plays. Don't stop there – go one step further! Use Skype, or some other video conferencing software to drop the classroom's walls – for inviting primary source experts, as well as streaming parallel, international studies. Now that's what I call documenting a lesson!

**Note:** *I always recommend using district, school, and even your own permission slips when doing image and video production. Checking acceptable use rules is a must.*


**Visit Ken's website:**
**www.educatorsroyaltreatment.com**

# A VIEW FROM THE CLASSROOM

Teresa Carter
– Parklands Junior School,
Romford – London Borough of Havering

**Visualiser and interactive whiteboard – great partners for learning.**
The visualiser has mainly been used as a very powerful document camera in my classroom. However, I have also used the annotation tools to edit and improve pupils writing on the whiteboard with the whole class, which has enabled me to print off the annotated work for pupils to see.

**Assessment for Learning at the heart of the visualiser's use**
I think the visualiser has had most impact when it has been used for showing the pupils how to edit and improve their writing. It has enabled me to instantly take a child's work in the lesson, place it under the visualiser and get immediate feedback from the children on grammar, spellings, punctuation and choice of vocabulary. They are then able to watch the teacher model making changes which empowers them and gives them the confidence to make appropriate changes in their own writing.

**Great for PPA time... an invaluable learning partner**
A visualiser has reduced photocopying and saves time preparing resources. It has enabled me to use real-time pupil activities and resources to model and give instructions. Additionally, a colleague borrowed my visualiser for a couple of days and I felt as if I had lost a real learning partner, as I rely on it and take it for granted now.

**Where to next?**
In the future I intend to make better use of the software - particularly the annotation tools, the camera and video.

PUPILS' VOICES. FEEDBACK FROM TERESA'S CLASS ON THE IMPACT OF THE VISUALISER ON THEIR LEARNING...

- "In show and tell people can see our things and we can talk about them better"
- "We can see the pictures and words in a story book without all crowding round"
- "It helps us do better work because we know the teacher might pick ours and put it under the visualiser so that everybody can see it so it helps us improve our writing"
- "When we do experiments, art or design and technology we can all see"
- "I like it when the teacher shows a good example of work and what we are supposed to do at the beginning of the lesson because I know what I have to do"


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.elmo-visualiser.co.uk**
and follow the instructions in the Lesson Ideas section, entering the promotional code **EV0310**.


# CITY LEARNING CENTRES

"It is completely interactive."

"It has the benefits of more than one piece of ICT equipment e.g. a camera, a video, an OHP and microscope."

## Visualisers get the thumbs up from teachers in Stoke schools – this is what they had to say:

"This also enabled the pupils to effectively peer assess the learning as they could all read it and make comments."

"The pupils were really excited about sharing their work which was put together with the visualiser. There was a sense of achievement from the children as they could see their end product which they had put together using many different ICT facilities."

"Allows whole-class evaluation of work and is able to be accessed very quickly. The pupils love showing their successes and are able to see where they have made mistakes and accept constructive criticism. The ability to take a photo of the pupils' work and annotate it is very effective."

"It is easy to enlarge and focus information for differentiation within a lesson."

"It proved invaluable recently when the whiteboard developed a fault - by allowing the lesson to continue by using the visualiser through the projector."

"Small delicate artifacts can be viewed and discussed by the whole class without danger of damage."

"The pupils love 'Elmo' and are enthused when they know we are going to use him."

"Pupils' work can be displayed and shared immediately with others, with no need for photocopying onto acetate etc."

"It is always ready to be used with a simple switch of a button.

"It is simple to use."

"It is good value for money as it can be used everyday."

"It is small and neat."

# STOKE & WANDSWORTH CITY LEARNING CENTRES

Dear Elmo,

Wandsworth City Learning Centre is a centre of excellence for ICT. Its innovative and creative practice of using multimedia resources, leading edge infrastructure and the latest industry level technologies, with outstanding practitioners, engages and enthuses' learners to achieve their full potential through a media of their choice. The Centre is a hub to varied and extensive partnerships and networks using inspired, cutting edge technology to enhance and transform learning, and disseminate best practice across Wandsworth.

"City Learning Centres are charged with piloting, and then recommending technologies into school classrooms, and over the last 2 years the most popular piece of equipment being demanded by teachers has the been the visualiser. The versatility and simple functionality, coupled with the immediate "wow" factor for learners has made it an essential tool for all teachers and a piece of hardware that can inspire and promote real innovative teaching practice."

The CLC hosts a collaborative BTEC offer across 4 subject areas for groups of learners from 4 different secondary schools. The visualiser has been used to full effect by different subject leaders. The music tutor has used it to demonstrate using multi-track recording equipment, the media teacher has used the animation functionality, the design teacher to allow learners to assess each others artwork and the performing arts tutors to project scripts during rehearsals.

Music Tutor Giovanni Sipianno stated, "The visualiser allows learners to view complex real time operations clearly which they not only can copy, but also fully understand. I use my visualiser in every lesson and would now be lost without it!"

Yours sincerely,

Alex Purssey
Wandsworth City Learning Centre Manager.

Mr. Alex Purssey
Wandsworth City Learning Centre Manager.

WANDSWORTH
CITY LEARNING CENTRE

# COST EFFECTIVE FRIENDLY TEACHING TOOL

Easy to Use

Contents Enhancer

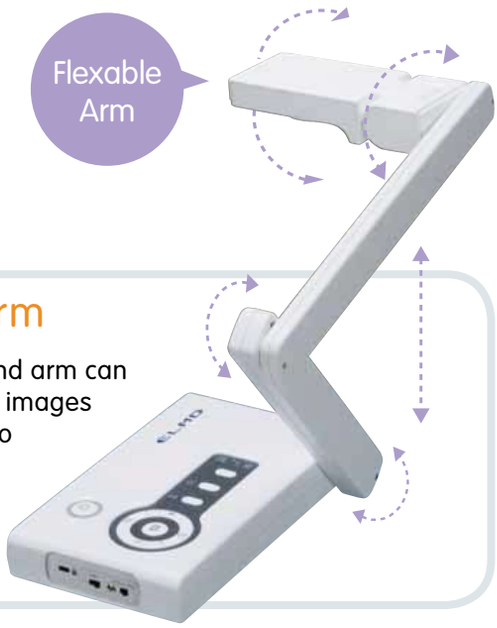
Great Features

Innovative

# i-Pochette

When not in use, i-Pochette folds down smaller than an A4-size piece of paper and fits into a handy carrying case. And at only 1.3 kg, it is light enough to go anywhere you do.


Flexable Arm



## Easy Operation

i-Pochette is surprisingly easy to use: just place your teaching materials under the camera, connect i-Pochette to a projector, and you're ready! The simple design of the control panel ensures easy operation, even for someone unfamiliar with this type of equipment.

## Flexible Camera Arm

The moveable camera head and arm can be freely positioned to capture images from any angle, allowing you to focus attention precisely where you want it.

## Microscope Viewing Mode

This mode lets you show microscope-slide images to give the entire class an up-close look at miniscule subject matter.

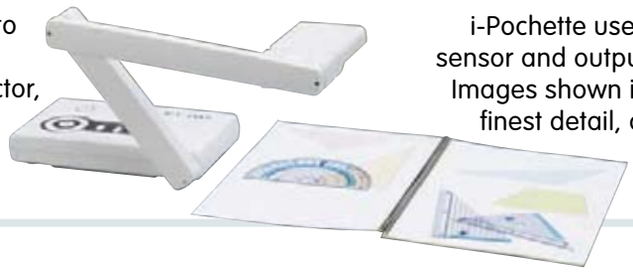
## 16-Image Memory

You can save up to 16 still image files to i-pochette - a handy function for recalling previously displayed images or for quickly recording a presentation.

i-Pochette is equipped with a USB 2.0 port for easy connection to a PC or an interactive whiteboard. With the bundled Image Mate software, you can easily control i-Pochette via a PC or import images captured with i-Pochette to a PC.

## Auto Focus & 6X Zoom

i-Pochette lets you focus in on details to make classroom explanations easy to follow. To explain how to use a protractor, for example, simply place one under the camera, focus in on the scale marks, and enlarge the image.



## 2-Megapixel CMOS Image Sensor

i-Pochette uses a 2-megapixel CMOS image sensor and outputs images in SXGA resolution. Images shown in high resolution, down to the finest detail, are sure to keep your students interested.

**Modes of operation and connectivity**
Elmo visualisers can be used in 3 different modes - Camera; PC or SD* (e.g. Image 1.1). To access all 3 options it is advisable to connect your PC to the visualiser using the USB and RGB cables (supplied) then connect the visualiser to a display (e.g. a projector) using your existing RGB cable (Image 1.2).

**Mode 1: Camera**
In 'Camera' mode the visualiser may be used as a simple presentation tool, while the remote control for the L-1ex (Image 1.3) has other useful options including: highlight, shading and picture-in-picture.

**Mode 2: PC**
For additional functionality - including use with an interactive whiteboard - you will need to use the visualiser in 'PC' mode and open the Image Mate software, consisting of 6 simple-to-use tools (Image 1.4).

There is an option to capture either JPEG or BITMAP still images, while the 'recorder' function (Image 1.5) can be used to capture 'live' video & audio as an AVI file.

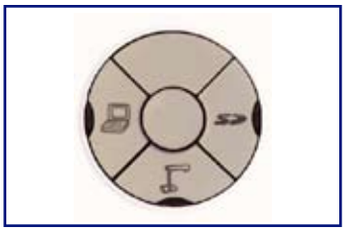
Additionally, a 'time lapse' mode - with settings accessible through an on-screen menu - enables you to capture a frame at intervals from 1 second to 24 hours - ideal for watching plants grow!

For video playback, there is also a 'variable speed' media player for slowing down or speeding up recorded sequences (Image 1.6).

Once a 'live' visualiser image is running on your PC, an on-screen remote (Image 1.7) can be used to operate the Elmo from the surface of your interactive whiteboard, while your whiteboard's floating tools will allow simple annotation and capture.

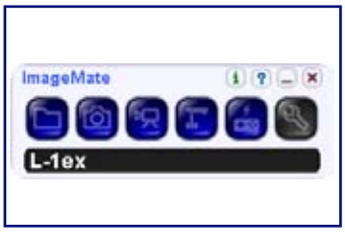
**Mode 3: SD**
Finally, in 'SD' mode the visualiser may be used to replay single images stored on an SD card or - if preferred - as a slide show.

* i-Pochette has internal image capture facility in place of SD option

1.1


1.2


1.3


1.4
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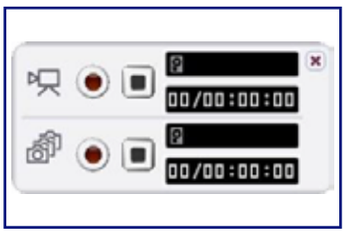


1.6


1.7



For more information on connecting and using ELMO visualisers please visit: www.elmo-visualiser.co.uk

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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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