

GROWING OLD GRACEFULLY

To insert a scanned image into a graphics application for subsequent artistic manipulation.

†† Pairs.

🕒 40 minutes at the computer; 20 minutes discussion.

Previous skills/knowledge needed

Children need the ability to use a hand-held scanner and should be familiar with the functions of the different graphics tools available.

Key background information

Video-fit images of missing persons or wanted criminals are commonly used in the media today. These realistic photographic images are nowadays generated by computer. Computerisation has vastly simplified the old process of gradually building up images of faces by matching together

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each individual feature chosen from a library of thousands of separate pictures. Computers allow easy access to many millions of possible combinations through their ability to hold large amounts of information.

A recent IT development is the ability to reconstruct images, showing how children who have been missing for many years may look today. The original photographs are enhanced to give the impression of increased age, following recognised patterns of change that take place as human faces age.

This activity will provide children with a simple introduction to the power of IT to produce subtle changes in images. It would support any current work you may be doing on growth or perhaps a project on 'Ourselves'.

Vocabulary

Original image, altered image, image enhancement.

Preparation

This activity requires the children to be able to scan in pictures on the computer and so you may find it helpful to use the 'Scan a leaf' activity on page 54 to introduce them to the technique.

Before doing the activity, collect some photographs from magazines or catalogues showing a mix of older and younger generations so that the children can see how faces change with age. If possible, find a 'video-fit' picture from a newspaper. The children will also need to bring in photographs of themselves for scanning in. These photographs need to show their faces clearly on a reasonable scale, as small images will be too difficult to work with.

Resources needed

A computer, a scanner, graphics software, a printer, paper, photographs of the children, photographs of faces of young children, teenagers, and young and old adults to show the ageing process.

What to do

Look at the collection of photographs with the children and discuss the variety of changes that happen to faces as people grow older. Point out features such as receding hairlines, wrinkles, lines around the mouth and eyes, furrowed brows and thickening jowls. At this point, the children could try making some rough sketches on paper to show the differences between old and young faces.

If possible, show the children a 'video-fit' image of a face and explain how images like these are generated on computers. Tell them that IT can be used to make subtle changes to photographs that are scanned in, including photographs of faces. Then provide a whole class demonstration to imitate this process on your computer. First, scan in a child's face from a photograph and transfer the image into a graphics application. Then choose the narrow paint spray tool to make changes. (The paintbrush tool will be too harsh, especially if the scanned image is grainy.) Merely adding features such as glasses, different hair, cupid lips, a moustache or beard will show the children how easy it is to alter the original image and produce different 'disguises' for it.

Ageing the face is more difficult. Show them how to reproduce wrinkles by adding thin lines using the narrow brush tool. A receding hairline can be created by erasing hair fringes with the paint spray tool. Create lines around

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the mouth and eyes using the narrow brush tool to complete the effect. (Adding glasses and changing hairstyles could also enhance the 'ageing' appearance.) Remind the children that using the undo button is available to erase any wrong moves made with the mouse.

Now let the children work in pairs on the computer each scanning in their own photograph and experimenting with altering the image. There is no clear completion point to this activity, but each child will probably need at least 20 minutes. The images can be saved and printed out if appropriate.

Suggestion(s) for extension

Children could produce a dossier of themselves in various disguises by manipulating their photograph in different ways.

Suggestion(s) for support

Less able children can concentrate on the facial disguises rather than the ageing process.

Assessment opportunities

You will be able to assess how well the children use the scanner to produce their initial image and how they use IT to convey graphic ideas through the enhanced images they work on. Look out for how well they use the graphics tools to achieve the variety of features that indicate an ageing face. How well do they amend any mistakes – do they use the 'undo' tool?

Display ideas

This activity can generate some intriguing artwork. Use it to make a 'Guess who?' game or a 'Rogues' gallery' display. Include the original photographs alongside the children's

manipulated images. You could also add in selections of photographs brought in by the children showing their grandparents or parents to illustrate the ageing process.

MUSICAL ILLUSTRATION

To provide an opportunity to use music composition software for a definite purpose.

†† Pairs or small groups.

⌚ 40 minutes at the computer; 10 minutes demonstration.

Previous skills/knowledge needed

Children should have a basic appreciation of how musical compositions include a beginning, a middle and an end. Familiarity with compositional software would be helpful but is not essential.

Key background information

Certain music software includes simple musical icons that allow children to make compositions without using standard notation. Every icon has a series of notes of varying lengths and pitch attached to it. Different icons are appropriate for the beginning, middle and end of tunes – usually, the children have to listen and choose the most suitable icon. Compositions are created by choosing a series of these icons. Usually, this type of software also has a tempo option providing easy control over the speed of compositions.

This activity involves using music software to demonstrate to the children the ease and flexibility that IT offers in creating compositions. The software allows easy editing of work through the immediate playback of chosen icons and the option to replace any icons in the sequence.

