

# Digital cameras from TTS

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I was recently asked to evaluate some items including the Oregon and JamCam 3.0 cameras. These appear to offer good value for money for schools so I shall share some of the details.

### Oregon Scientific Camera

£39.99

Superficially this is an attractively made product which feels nice to hold. Because it is small, the target of the image can easily be off centre, but you only find this out when uploading the captured images. (Since I have similar trouble when rifle shooting, this may be a personal failing!)

There appears to be reasonable battery life but the screwdriver required to release the battery cover is a specialist item which will be supplied on purchase together with cable and software to upload images into the computer.

The quality of the image from the camera is obviously a compromise, (based on cost), but I began to wonder if it is really adequate for class use. My opinion is that it would be fine if used to record the progress of a D&T project but no use for a web page or a desk top published document image.

The software places the captured images in albums, which can be very difficult to find later when you wish to incorporate them in a document. If you are a competent user of a PC then the images can be found in:

C:/programs/arcsoft/photos1/pb\_20/photos



Oregon camera

This is not the easiest way to retrieve images!

It is possible to use the supplied software to enhance images but, my guess is, you will want to use them in documents or artwork straight away and won't have time to experiment with the package's potential.

### JamCam 3.0

£79.95

This is an up-rated version of the JamCam 2.0 which sold for £59.95 until recently. They represented good value and may still be purchased as new 'old stock'. The older camera gave you switchable resolutions called R1, R2 and R3:

Display	Resolution	Picture capacity
R1	640 × 480	8
R2	320 × 240	26
R3	240 × 180	48

The R2 images were acceptable but quality work meant using R3 and only taking 8 images. Nevertheless, this represented value for money.

The new camera has only two display settings as follows:

Display	Resolution	Picture capacity
R1	320 × 240	28
R2	640 × 480	8



JamCam 2.0 camera



JamCam 3.0 camera



Fuji Film SD-T7 camera

The handbook recommends that the user should normally use the R2 setting and only use the R1 setting for emails, 2" x 3" wallet photos or small web site images. This appears to be an acceptance of the quality of image issue. Note that there are no 240 x 180 pixel images with the new camera.

There is an optional MMC, (Multi Media Card) available that allows more images to be stored in the camera.

The software for the camera is straightforward

although not always intuitively obvious; i.e. it pays to read the manual! Images are saved into a folder but can be saved direct to a floppy disc or a named directory on the hard disc.

I compared both the above digital cameras with my own Fuji-Film SD-T7 camera which cost about £350 two years ago. This camera takes 30 images in standard mode (640 x 480 pixels) and 60 in economy mode (320 x 240 pixels). I normally only use standard mode. The major advantage of this

**Comparing the Oregon, The Jam Cam 3.0 and Fujifilm DS-T7 cameras**

Oregon camera	JamCam 3.0 camera	Fuji Film DS-T7 camera
60 * 100 * 26 mm and very light, 77 g	62 * 106 * 34 mm, fairly light, 180 g	76 * 128 * 46 mm, quite heavy, 240 g
15 colour images 24bit colour	8 (640 x 480 pixels) images	30 (640 x 480 pixels) images using original colour CCDs
One 1.5 volt AA battery giving 3 hours continuous use	One 9 volt 6LR61 battery, unknown life span	4 NiCad rechargeable AA batteries giving 1 hour continuous use
View finder with no indication of number of images taken	View finder indicating number of images left to take, battery level, timer and flash	LCD display of image. Switch on top to view or delete images taken, timer, change mode or upload images to PC. Brightness of LCD display can be adjusted
No flash	Built in switchable flash	Built in switchable flash
No memory extension	Multi Media Card available to add more images into memory	Image Memory card available to add more images into memory
No adjustment for focal length or aperture	No adjustment for focal length or aperture	Switchable focal length and aperture
£39.99	£79.99	£349.99
Small images when inserted into <i>Word</i> or <i>Textease</i> . These distort on enlargement	Large images when inserted into <i>Word</i> or <i>Textease</i> . Can be made smaller with little distortion	Large images when inserted into <i>Word</i> or <i>Textease</i> . Can be made smaller with little distortion
Difficult to manipulate in an art package	Gives a good size image in art packages which is easy to manipulate	Gives a good size image in art packages which is easy to manipulate

camera is that it has an LCD screen instead of a view finder which means that you 'snap' exactly what you see! You can also delete images on play back through the view finder and hence maximise the images taken "in the field".

The Oregon has to have images removed by software and the JamCam can have its memory cleared but it will only clear all the saved images, i.e. you are advised to clear the memory only after all the images have been saved to disc.

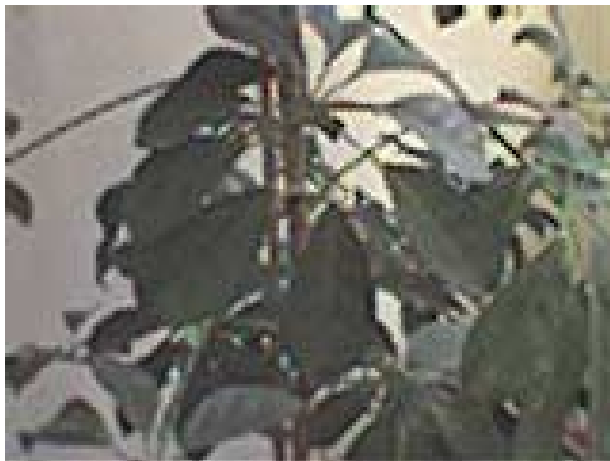
### Conclusion

The above seems to show that the more you pay, the better you get. A digital video camera is about

£550 and is the bee's knees but beyond the purchasing power of most of us. The Jam Cam 3.0 is really good value for money with a limited number of high quality shots that can be used within any application. The Oregon camera has limitations but would be ideal as a first camera to gain experience or as a dedicated camera for use in the continuous recording of projects or curriculum work. The only other comparison is the use of a scanner, where any materials can be scanned in to the computer, saved and used in documents later. The problem is that the developing and printing time for ordinary photographs delays the process significantly whereas the digital camera images can be used immediately you come back to the classroom.

## Oregon Digital Camera images

These images have been 'inserted into a Word document straight from the Oregon camera software. The enlarged images lose some of their sharpness:



*A plant in my room*

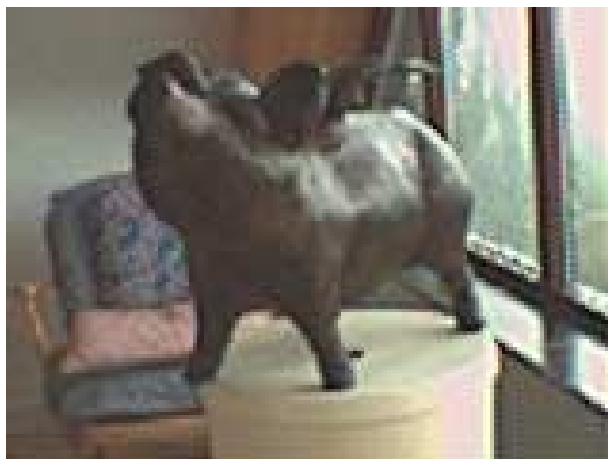


*A painting behind a glass frame*



*Models made as part of a D&T project*



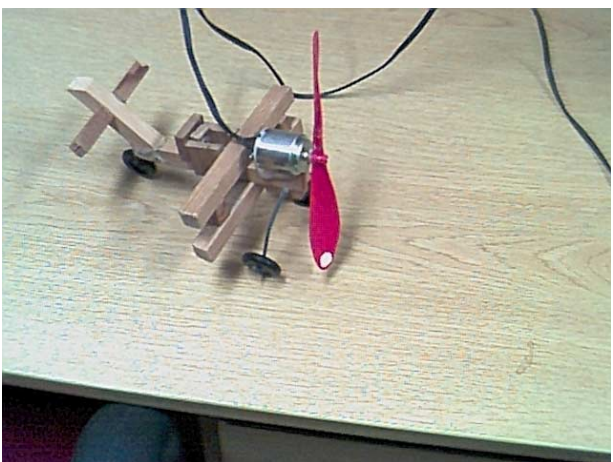


*Two views of my 'Flying Pig'*

### Jam Cam 3.0 Digital Camera images



*Two views of my 'Flying Pig' which have had to be reduced to fit side by side. The original images take up the full width of the A4 paper.*



*Here is the plane from the D&T project and the plant from my room.*