

# Augmented Reality

## Introduction

In this ICT (information and communications technology) video, we look at Augmented Reality, in which your computer screen becomes a magic mirror. The idea is to use a camera and a black and white marker to transmit real-time information about an objects angle and spatial position. This way, real elements (the desktop, hands and marker) are mixed in with virtual elements. Unlike a mirror, though, the image appearing on the screen inverts right and left, which makes orientation a little more complicated. This video looks at various illustrations of this technology which has a high potential in education.

- 00:42 [Simple Marker : a fish](#)
- 01:18 [AR Piano Tutor](#)
- 01:37 [Les animaux du futur](#) from Futuroscope (in French)
- 01:57 [Mixed Reality Learning Media: effects in classroom education](#) (chemistry molecules)
- 02:21 [Smart Grid Augmented Reality](#) (wind turbine and solar panels)
- 02:50 [Metaio augmented solutions, movie 2: Interactive encyclopedia](#)
- 03:09 [Toyota IQ car](#)
- 03:29 [Arsights](#) (Watch Google™ Earth models on your desktop!)  
[Google SketchUp](#) (free software to be used with Arsights; you can find files of 3D objects if you look for .skp or .skb extensions)
- 04:01 [Livingsasquatch](#), animate a yeti
- 04:11 [An augmented reality application that lets you locate metro stations in Paris.](#)
- 04:34 [Experience the Enterprise](#) (you must install the ActiveX plug-in)

## Other references

- [ARToolKit v4.4 Running on iPhone](#)
- [Mr Planet](#), free software
- Microsoft's [Natal Project](#)

## We recommend you follow a few instructions:

- Print the markers on thin cardboard, or paste them onto cardboard so they remain stable.
- The camera absolutely needs to see the markers' borders; avoid hiding them with your fingers, or allow for a wider margin.
- Make sure to have good front lighting or a well-lit workspace, so the camera can easily detect the markers.