

Input – Process – Output Reading for Meaning

An input device is a piece of hardware which puts data into a device. Common types of data are sound, which is inputted using a microphone; text which is inputted using a keyboard and images which are inputted using a camera or a document scanner.

Sensors detect heat and light and are used to automatically control a system, such as a fire alarm or automatic lights.

When we select icons or use controls within an app or piece of software we use either a mouse, on a PC (personal computer) or a touchscreen, on tablets and smartphones.

Other input devices are biometric. This means they use unique physical data about a person to input their identity. These include eye scanners, voice scanners, face recognition and, something you use in The Courtyard, a fingerprint scanner.

When you play a game on a tablet or smartphone which involves tilting the device to get an action on screen, a built-in input device called an accelerometer is being used to detect the position of the device.

For people with limitations or disabilities, there is specialist software and hardware to allow them to interact with their computing devices. These include selecting letters on a keyboard using eye blinks or staring, Braille keyboards, voice input, specialised apps and adaptive hardware such as a foot mouse.

Once the data is in the device it is processed and we can see or hear the results on output devices. These are pieces of hardware. Examples of output devices include printers, which produce paper copies of what we see on our monitor; headphones and speakers which output sound and motors which generate movement. For example, using a remote controlled car.

In class, teachers use projectors to show their screen on the big whiteboard.

We generally need to store data as well and usually we do this on the internal hard drive of the device. Other forms of portable storage are available; the most commonly used USB memory sticks, SD cards and external hard drives.