

**Multimedia** is [media](#) and [content](#) that uses a combination of different [content forms](#). This contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material. Multimedia includes a combination of [text](#), [audio](#), [still images](#), [animation](#), [video](#), or [interactivity](#) content forms.

Multimedia is usually recorded and played, displayed, or accessed by [information content](#) processing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia devices are [electronic media](#) devices used to store and experience multimedia content. Multimedia is distinguished from [mixed media](#) in [fine art](#); by including audio, for example, it has a broader scope. The term "rich media" is synonymous for [interactive multimedia](#). [Hypermedia](#) can be considered one particular multimedia application.

## Usage / Application

---

Multimedia finds its application in various areas including, but not limited to, [advertisements](#), [art](#), [education](#), [entertainment](#), [engineering](#), [medicine](#), [mathematics](#), [business](#), [scientific research](#) and [spatial temporal applications](#). Several examples are as follows:

### Creative industries [\[edit\]](#)

[Creative industries](#) use multimedia for a variety of purposes ranging from fine arts, to entertainment, to commercial art, to [journalism](#), to media and software services provided for any of the industries listed below. An individual multimedia designer may cover the spectrum throughout their career. Request for their skills range from technical, to analytical, to creative.

### Commercial uses [\[edit\]](#)

Much of the electronic [old](#) and [new media](#) used by commercial artists is multimedia. Exciting presentations are used to grab and keep attention in [advertising](#). Business to business, and interoffice communications are often developed by [creative services](#) firms for advanced multimedia presentations beyond simple slide shows to sell ideas or liven-up training. Commercial multimedia developers may be hired to design for [governmental services](#) and [nonprofit services](#) applications as well.

### Entertainment and fine arts [\[edit\]](#)

In addition, multimedia is heavily used in the entertainment industry, especially to develop [special effects](#) in movies and animations. Multimedia games are a popular pastime and are software programs available either as CD-ROMs or online. Some [video games](#) also use multimedia features. Multimedia applications that allow users to actively participate instead of just sitting by as passive recipients of information are called *Interactive Multimedia*. In the [Arts](#) there are [multimedia artists](#), whose minds are able to blend techniques using different media that in some way incorporates interaction with the viewer. One of the most relevant could be [Peter Greenaway](#) who is melding [Cinema](#) with [Opera](#) and all sorts of digital media. Another approach entails the creation of multimedia that can be displayed in a traditional fine arts arena, such as an [art gallery](#). Although multimedia display material may be volatile, the survivability of the content is as strong as any traditional media. Digital recording material may be just as durable and infinitely reproducible with perfect copies every time.

### Education [\[edit\]](#)

In [Education](#), multimedia is used to produce [computer-based training](#) courses (popularly called CBTs) and reference books like encyclopedia and almanacs. A CBT lets the user go through a series of presentations, text about a particular topic, and associated illustrations in various information formats. [Edutainment](#) is the combination of education with entertainment, especially multimedia entertainment.

Learning theory in the past decade has expanded dramatically because of the introduction of multimedia. Several lines of research have evolved (e.g. [Cognitive load](#), [Multimedia learning](#), and the list goes on). The possibilities for learning and instruction are nearly endless.

The idea of media convergence is also becoming a major factor in education, particularly higher education. Defined as separate technologies such as voice (and telephony features), data (and productivity applications) and video that now share resources and interact with each other, synergistically creating new efficiencies, media convergence is rapidly changing the curriculum in universities all over the world. Likewise, it is changing the availability, or lack thereof, of jobs requiring this savvy technological skill.

The English education in middle school in China is well invested and assisted with various equipments. In contrast, the original objective has not been achieved at the desired effect. The government, schools, families, and students spend a lot of time working on improving scores, but hardly gain practical skills. English education today has gone into the vicious circle. Educators need to consider how to perfect the education system to improve students' practical ability of English. Therefore an efficient way should be

used to make the class vivid. Multimedia teaching will bring students into a class where they can interact with the teacher and the subject. Multimedia teaching is more intuitive than old ways; teachers can simulate situations in real life. In many circumstances teachers don't have to be there, students will learn by themselves in the class. More importantly, teachers will have more approaches to stimulating students' passion of learning

## **Journalism** [\[edit\]](#)

Newspaper companies all over are also trying to embrace the new phenomenon by implementing its practices in their work. While some have been slow to come around, other major newspapers like [The New York Times](#), [USA Today](#) and [The Washington Post](#) are setting the precedent for the positioning of the newspaper industry in a globalized world.

News reporting is not limited to traditional media outlets. Freelance journalists can make use of different new media to produce multimedia pieces for their news stories. It engages global audiences and tells stories with technology, which develops new communication techniques for both media producers and consumers. [Common Language Project](#) is an example of this type of multimedia journalism production.

Multimedia reporters who are mobile (usually driving around a community with cameras, audio and video recorders, and wifi-equipped laptop computers) are often referred to as [Mojos](#), from *mobilejournalist*.

## **Engineering** [\[edit\]](#)

[Software engineers](#) may use multimedia in [Computer Simulations](#) for anything from entertainment to [training](#) such as military or industrial training. Multimedia for [software interfaces](#) are often done as a collaboration between [creative professionals](#) and software engineers.

## **Industry** [\[edit\]](#)

In the [Industrial sector](#), multimedia is used as a way to help present information to shareholders, superiors and coworkers. Multimedia is also helpful for providing employee training, advertising and selling products all over the world via virtually unlimited web-based technology

## **Mathematical and scientific research** [\[edit\]](#)

In [mathematical](#) and [scientific research](#), multimedia is mainly used for modeling and simulation. For example, a [scientist](#) can look at a [molecular model](#) of a particular substance and manipulate it to arrive at a new substance. Representative research can be found in journals such as the [Journal of Multimedia](#).

## **Medicine** [\[edit\]](#)

In [Medicine](#), [doctors](#) can get trained by looking at a virtual [surgery](#) or they can simulate how the [human body](#) is affected by [diseases](#) spread by [viruses](#) and [bacteria](#) and then develop techniques to prevent it.

## **Document imaging** [\[edit\]](#)

[Document imaging](#) is a technique that takes hard copy of an image/document and converts it into a digital format (for example, scanners).

## **Disabilities** [\[edit\]](#)

Ability Media allows those with disabilities to gain qualifications in the multimedia field so they can pursue careers that give them access to a wide array of powerful communication forms.

## **Miscellaneous** [\[edit\]](#)

In Europe, the reference organisation for Multimedia industry is the [European Multimedia Associations Convention](#) (EMMAC).