

# Chapter 6

## Making Good Use of Pictures

**Pınar Nuhoğlu Kibar**

*Hacettepe University, Turkey*

**Rune Pettersson**

*Institute for Infology, Sweden*

### ABSTRACT

*Pictures have been important for communication for thousands of years. It is easy for students to lose interest in learning materials with complicated content. Visuals may have many functions, such as attract, gain, get, hold, and maintain attention of a learning material. In contrast to pictures used for advertising, decoration, and entertainment, the main purposes for use of visuals in education are cognitive and pedagogical. Our use of pictures must always be adapted to the intended audiences, and to the available technology. Teachers, and students, need to pay attention to visuals in learning materials. Most students do not attend to the visuals unless they actually are instructed to do so. At this point, how pictures are included in the learning process is decisive on the expected impact. As an effective visualization type, infographics enable conveying complex information in a big picture by combining text and visuals. Beyond instructor-provided infographics, infographic creation enables focusing on a subject, researching in-depth and visualizing the constructed knowledge.*

Most likely humans have “always” used visual messages to communicate. Body paintings, tattoos and scarification occur in all traditional tribal cultures all over the world. Throughout the ages, people have adorned themselves with various visual decorations. Obviously, most of these pictures on human bodies have not been preserved. However, there are some archaeological materials showing that humans have created dots, lines and abstract geometric designs some thousand years ago. In September 1991 a well-preserved natural mummy was found in the Ötzi valley on the border between Austria and Italy in the Alps. The Iceman Ötzi lived about 5,200 years ago. So far this is the oldest natural human mummy in Europe. Ötzi had 57 carbon tattoos consisting of parallel and vertical lines on his back, a small cross behind one knee and dots and lines around both ankles. These signs may have shown his tribal affiliation or his social position (Palmer, Bahn & Tyldeslv, 2006, pp. 32f). The tattoos may also have been related to pain relief treatments.

DOI: 10.4018/978-1-7998-7760-8.ch006

Already 100,000–70,000 years ago humans sporadically occupied the Blombos Cave in South Africa. In this cave, Henshilwood, d’Errico & Watts (2009) have found more than 8,000 pieces of an ochre-like material. It is quite clear that humans deliberately have engraved, or incised, these ochre pieces with abstract geometric designs. So far, these patterns are the oldest known human “artworks.”

Simple graphic symbols have been found in every culture however primitive. In different geographical areas symbols are a supplement to verbal languages, and they help create better and faster understandings. Symbols are often composed of basic graphical elements, such as dots, lines, circles, ovals, rectangles, squares, triangles, and various combinations of these elements. Today, it is not possible for researchers to exactly understand the specific meanings of such graphic symbols.

So far, most of the studied cave paintings within Europe were made during the period 18,000–10,000 years before our own time. Animals like aurochs, buffalo, deer, horses, and reindeer are common motifs in many of these caves. Today, it is easy to believe that the individuals who actually created these cave paintings believed that they could improve their own hunting luck, as well as the fertility of their game animals, and the fertility of their own families. Some of these cave paintings have been widely reproduced in various print media, and in television. Thus, some of these cave paintings are now quite familiar to the general public.

Our society is becoming increasingly diverse and more visually oriented. Since *seeing* is direct and effortless many believe that visuals will communicate instantly and universally. Making and understanding visual messages is natural to a point. However, we all need to *learn* how to construct, how to read and how to understand pictures. Few really appreciate and understand the critical role of visual communication and visual literacy in our modern societies. A person with good *visual literacy skills* can extract the most important ideas from visual messages. In order to improve visual literacy abilities, competencies, and skills, we need to practice reading visuals through analysis techniques, and to produce visuals as tools for communication (Avgerinou & Pettersson, 2020). Today competency in visual literacy is crucial for effective visual communication. McVicker (2018) concluded that visual literacy skills assist students in all levels of concept and skill learning. However, studies of visual literacy are not yet common in formal education curricula anywhere in the world.

## **IMAGE FUNCTIONS IN LEARNING**

It is easy for students to lose interest in all kinds of learning materials with complicated content. For several centuries, educators have used images and pictures in their work. With the help of good images and pictures, it is possible to illustrate concepts and phenomena that are complicated and difficult to explain with words alone. At present, online and blended learning is occurring around the globe in meaningful ways to address specific needs of K-12 students (Barbour, 2018).

Visuals may have different *intended functions*, and also different *real functions*. Visual messages stimulate us both *emotionally* and *intellectually*. Images and pictures make us *feel* as well as *think*. Many researchers in information design, instructional message design, visual communication, and visual literacy have suggested various functions, objectives, purposes and roles for the use of images and pictures. Pettersson (2020, p. 10–21) found that authors of chapters in books, and research articles expressed more than 250 opinions about image functions. These researchers used more than one hundred different explanatory verbs to express their opinions. Most of these opinions concern *attention*, such as attract, gain, get, hold, and maintain attention to a text.

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/making-good-use-of-pictures/275562](http://www.igi-global.com/chapter/making-good-use-of-pictures/275562)

## Related Content

---

### Mobile VR in Education: From the Fringe to the Mainstream

Thomas Cochrane (2016). *International Journal of Mobile and Blended Learning* (pp. 44-60).

[www.irma-international.org/article/mobile-vr-in-education/163900](http://www.irma-international.org/article/mobile-vr-in-education/163900)

### Integrating Classroom and Online Instruction in an Introductory American Government Course

Richard Engstrom (2010). *Cases on Online and Blended Learning Technologies in Higher Education: Concepts and Practices* (pp. 283-295).

[www.irma-international.org/chapter/integrating-classroom-online-instruction-introductory/38020](http://www.irma-international.org/chapter/integrating-classroom-online-instruction-introductory/38020)

### Research Essay: Mobile Learning

John Traxler (2011). *International Journal of Mobile and Blended Learning* (pp. 57-67).

[www.irma-international.org/article/research-essay-mobile-learning/54038](http://www.irma-international.org/article/research-essay-mobile-learning/54038)

### Mobile-Assisted Language Learning: Research-Based Best Practices for Maximizing Learner Success

Katharine B. Nielson (2017). *Blended Learning: Concepts, Methodologies, Tools, and Applications* (pp. 818-842).

[www.irma-international.org/chapter/mobile-assisted-language-learning/163558](http://www.irma-international.org/chapter/mobile-assisted-language-learning/163558)

### Educational Leadership: Cultivating Leadership Qualities Generates Student Leaders

Jenny E. Grigoropoulos (2021). *Handbook of Research on K-12 Blended and Virtual Learning Through the iFlex Classroom Model* (pp. 162-173).

[www.irma-international.org/chapter/educational-leadership/275565](http://www.irma-international.org/chapter/educational-leadership/275565)