MULTIMEDIA PRINCIPLES OF PRESENTATION

Multimedia Principles of Presentation

How do you ensure that your presentations will be an effective learning resource? Multimedia learning is a type of computer-aided instruction that employs two modalities at the same time (Mayer & Moreno, 2002). This includes learning through a combination of visuals (pictures, animations, text, and videos) and audio (through narrated voiceover). Mayer (2001) discusses 12 principles that will help you to design multimedia presentations effectively.

12 Principles

Coherence	**Signalling**	**Redundancy**	**Spatial Contiguity**
Temporal Contiguity	**Segmenting**	**Pre-training**	**Modality**
Multimedia	**Personalisation**	**Voice**	**Image**

The multimedia principles enable us to learn better from words and pictures than from words alone.

12 Principles of Multimedia

1. **Coherence:** The principle of coherence refers to the inclusion of only relevant

   information in the instructional media, excluding other information and content.

Coherence Principle Example:

Franz Kafka was a German-speaking Bohemian novelist and short-story writer, widely regarded as one of the major figures of 20th-century literature.

2. **Signaling:** The principle of signaling describes the use of markings (underline, bold or

   italicized, etc.) to emphasize information and make it clear.

Signaling Principle Example:

Few of **Kafka's works** were published during his lifetime: the story collections **Contemplation** and **A Country Doctor**, and individual stories (such as "The Metamorphosis") were published in literary magazines but received little public attention.

3. **Redundancy:** The principle of redundancy suggests that the narration formed by

   vocalizing together with the text or animation on the presentation screen.

Redundancy Principle Example:

Metamorphosis (German: Die Verwandlung) is a novella written by Franz Kafka which was first published in 1915.

THE METAMORPHOSIS: THE CLASSIC SHORT NOVEL
BY FRANZ KAFKA

THE METAMORPHOSIS: THE CLASSIC SHORT NOVEL
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4. **Spatial Contiguity:** This principle refers to the fact that the names of the pictures should appear on the screen along with the words.

5. **Temporal Contiguity:** The principle of temporal contiguity emphasizes the simultaneous appearance of a picture and a word or sound.

Spatial and Temporal Contiguity Example:

Kafka's House   Kafka Museum

6. **Segmenting:** The principle of segmenting refers to the options to control the speed of your presentation and pause the slide or video.

Segmenting Example:

Franz Kafka (3 July 1883 – 3 June 1924) was a German-speaking Bohemian novelist and short-story writer, widely regarded as one of the major figures of 20th-century literature.	• Franz Kafka (3 July 1883 – 3 June 1924) • German-speaking Bohemian novelist and short-story writer • Widely regarded as one of the major figures of 20th-century literature.

7. **Pre-Training:** This principle proposes presenting content that can be described as preparatory, before moving on to the main topic to be covered in the presentation.

Pre-Training Example:

Kafkaesque is a situation that is almost surreal. It is often considered to be a difficult situation, likely resembling a nightmare. Kafkaesque comes from the last name of Franz Kafka, a famous author known for his stories with surrealism and disoriented characters.
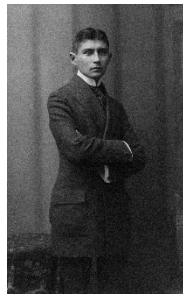
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8. **Modality:** The modality principle emphasizes the presentation of pictures and audio narration together.

9. **Multimedia:** The multimedia principle explains that expression with pictures and words promotes better learning than expression with words alone.
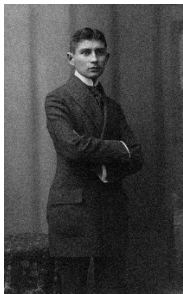
Modality Example:	*Multimedia Example:*
	Franz Kafka was a novelist and short-story writer, widely regarded as one of the major figures of 20th-century literature.

10. Personalization: The principle of personalization refers to the personalization of the information presented in the slide with the voice of the narrator.

Personalization Example:

✖	✔
Franz Kafka was a novelist and short-story writer, widely regarded as one of the major figures of the 20th-century literature.	Franz Kafka is one of the most important novelists of the 20th-century literature.

11. Image: The image principle proposes to use the image of the narrator in the presentation (for example; the talking head) and the actual image in the presentation.

12. Voice: The voice principle recommends the use of human voice instead of computer voice.

References

Mayer, R. E. (2001). *Multimedia learning.* Cambridge, UK: Cambridge University Press.

Mayer, R. E. & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational Psychologist, 38*(1), 43 - 52.

How to use Mayer's 12 Principles of Multimedia

https://waterbearlearning.com/mayers-principles-multimedia-learning/

12 Principles of Multimedia | NYU

https://www.nyu.edu/content/dam/nyu/facultyResources/documents/ESMITS/12PrinciplesofMultimedia.pdf

Further Readings and Resources

- 12 Principles of Multimedia Learning - University of Hartford

- Principles of Multimedia Learning