

# Multimedia Resources for Teaching, Learning and Assessment

## Concept, Need, and Scope

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# Types of media

- Audio
- Text
- Drawing / Illustrations
- Photographs
- Videos
- Animation
- Simulation
- Augmented Reality / Virtual Reality
- Mixed reality, Metaverse
- ...



# Types of media

Audio	Listening
Text	Reading / Symbols
Graphics	Imagery
Photographs	Factual representation



# Types of media

Videos	Factual representation using moving images
Animation	Moving images
Simulation	Interactivity
Augmented Reality / Virtual Reality	Technology enabled imagery in the user's environment in real time, Immersive technologies

# Graphics

## Static graphics

- Drawings/Illustrations
- Photographs
- Charts/tables/graphs

## Motion graphics

- Videos
- Animations



# Graphics For Learning

**TABLE 1** A communication taxonomy for graphics for Learning

Function	A graphic used to:	Examples
<b>Decorative</b>	Add aesthetic appeal or humor	<ul style="list-style-type: none"><li>• Art on the cover of a book</li><li>• Visual of a general in a military lesson on ammunition</li></ul>
<b>Representational</b>	Depict an object in a realistic fashion	<ul style="list-style-type: none"><li>• A screen capture</li><li>• A photograph of equipment</li></ul>
<b>Mnemonic</b>	Provide retrieval cues for factual information	<ul style="list-style-type: none"><li>• A picture of 10 forks stuck in a door to retrieve meaning of Spanish word for fork: Tenador</li></ul>
<b>Organizational</b>	Show qualitative relationships among content	<ul style="list-style-type: none"><li>• A two-dimensional course map</li></ul>
<b>Relational</b>	Show quantitative relationships among two or more variables	<ul style="list-style-type: none"><li>• A line graph</li><li>• A pie chart</li></ul>
<b>Transformational</b>	Show changes in objects over time or space	<ul style="list-style-type: none"><li>• An animation of a weather cycle</li><li>• A video showing how to operate equipment</li></ul>
<b>Interpretive</b>	Illustrate a theory or principle	<ul style="list-style-type: none"><li>• A schematic diagram of equipment</li><li>• An animation of molecular movement</li></ul>

Carney, R.N.  
Levin, J.R



# Graphic types

## Decorative

Add aesthetic appeal or humor

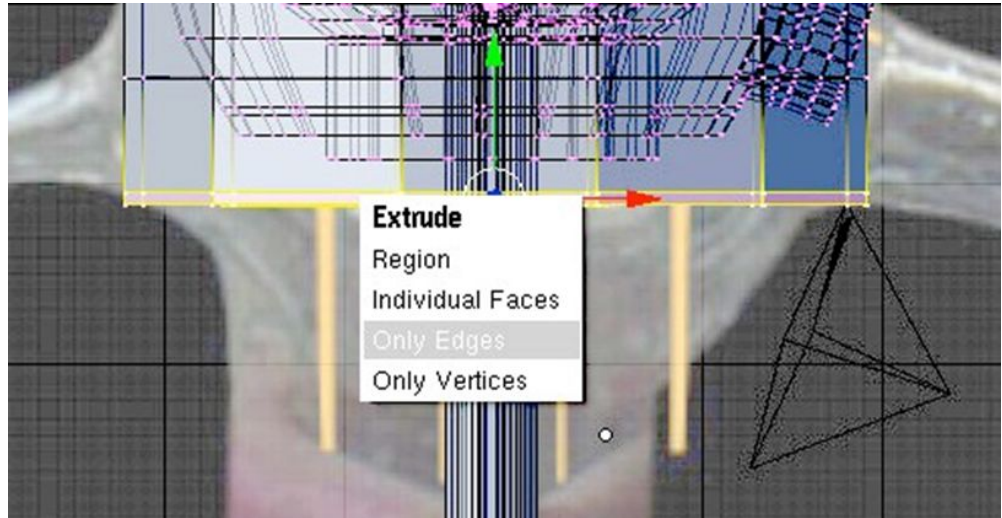


# Graphic types



## Representational

Depict an object in a realistic fashion



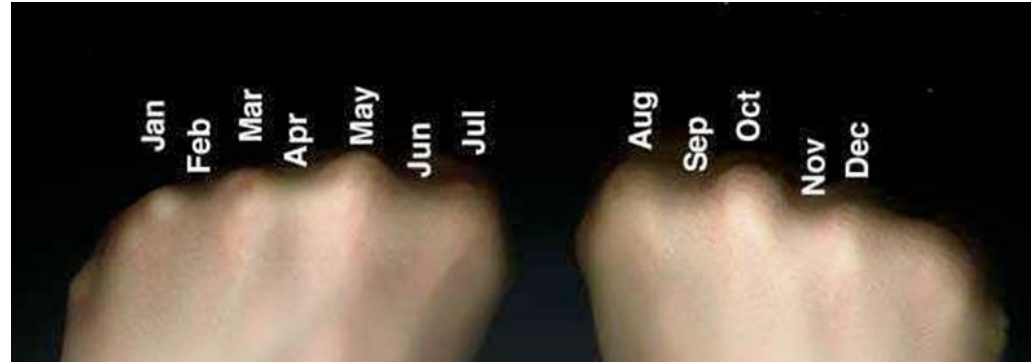


# Graphic types



## Mnemonic

Converting a graphic in a form that the brain remembers it better



<http://trainingwheels.homestead.com/>  
[www.en.wikipedia.org](http://www.en.wikipedia.org)



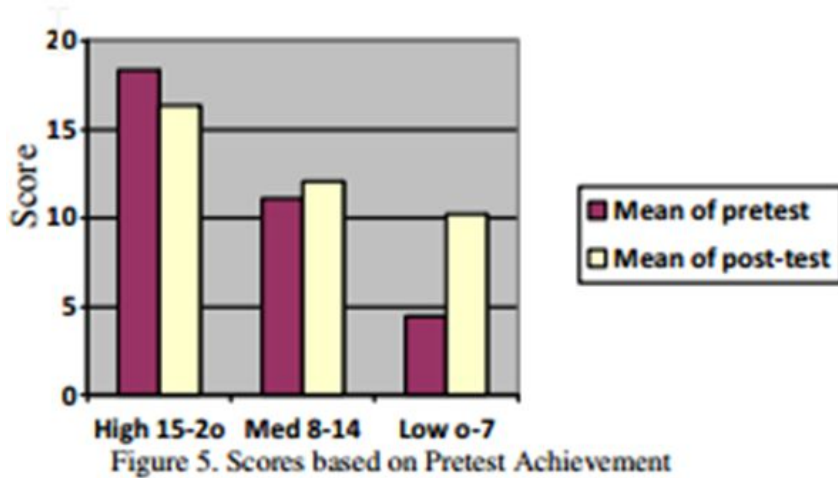
# Graphic types



**Organizational**  
Showing qualitative  
relationships



# Graphic types



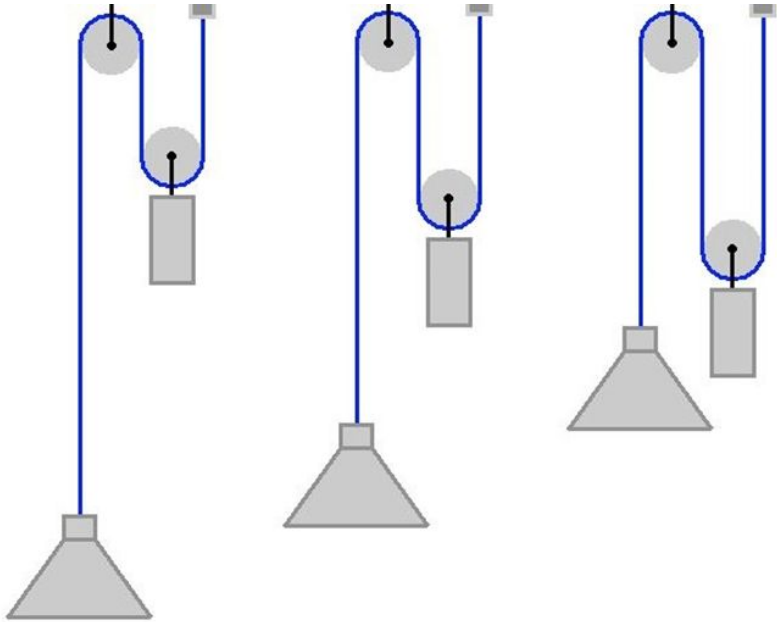
## Relational

Showing quantitative relationships



<http://nicolesouza211.blogspot.in/>

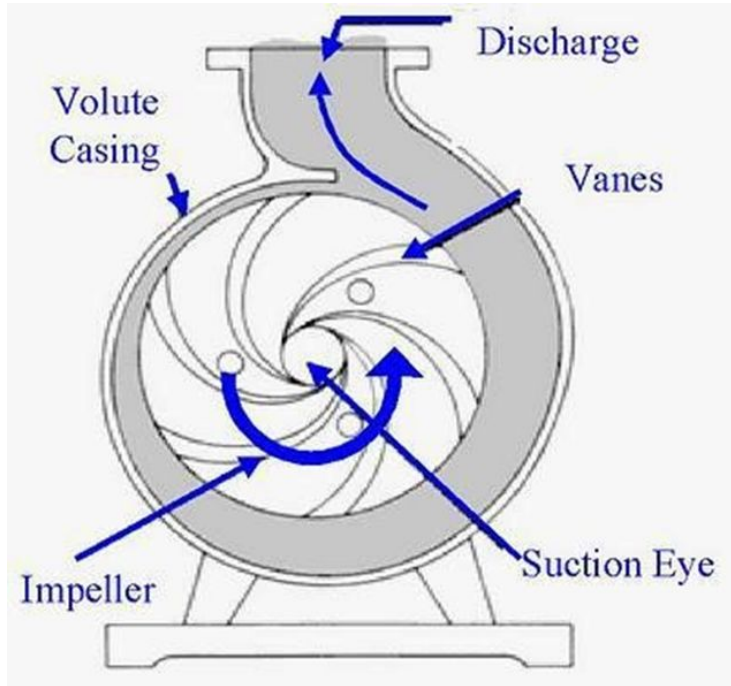
# Graphic types



## **Transformational**

Show changes over  
time and space

# Graphic types



## Interpretive

Illustrate a theory or a principle

# Content specific graphics\*

- Fact
- Concept
- Principle
- Process
- Procedure
- Representational
- Representational / organizational
- Multimedia dynamic visuals
- Organizational / interpretive
- Dynamic visuals

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