



<http://vistolearn.online/>

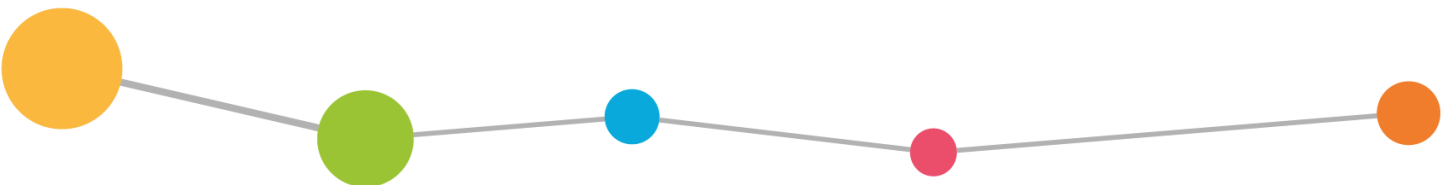
Activity Plan for Creating Interpretive Instructional Graphics*

Jan 2023

*This activity plan was created within the scope of Project VistoLearn which is supported by IVLA research Grant 2020.

Pınar Nuhođlu Kibar, Ph.D.
pnuhoglu@hacettepe.edu.tr

Hacettepe University, Faculty of Education
Computer Education & Instructional Technology



Learning Level

College/University
Professional Development

Discipline

Education/Instructional Design

Short Overview

Interpretive graphics are a kind of instructional graphics used to make concrete abstract processes and events. The aim of this learning activity is to present a way of analyzing and creating instructional graphics which have interpretive communication functions. This learning activity takes attention to the grammar of visualization in order to create effective instructional graphics. This activity plan and learning materials can be the first step to analyze and create interpretive graphics, which can be continued with creating more complicated graphics. The duration of the implementation of the activity may be short or long according to the competencies of learners. This plan was created by an instructional designer who focuses on how to create learning processes to help learners to become effective visualizers especially for learning/teaching purposes.

Learning Outcomes

By the end of this learning activity the learner/s will be able to:

- define instructional graphics and interpretive communication function
- analyze visuals in terms of used visual components and visual encodings based on VisDNA
- create instructional graphics which have interpretive communication function

Resources Required

Computer/s and internet connection
Online Tools for Vector Drawing (inkscape, corelvector etc.)
Online Tools for Visual Design (piktochart, canva etc.)

Downloads/Attachments

Activity Plan
Presentation File
Drag and Drop Activity File

Useful Links

The DNA of Visualization: A universal grammar for specifying visualization types
A project by Clive Richards & Yuri Engelhardt
<https://visdna.com/>

VistoLearn: Designing Pre-Learning Activities for Visual Literacy Sub-skills Through Educational Design Research Method
A Project by Pınar Nuhoğlu Kibar
<http://vistolearn.online/>

Summer School Theory Cards
A publication by Simplification Center
<https://www.simplificationcentre.org.uk/reports2/summer-school-theory-cards>

Vector Drawing Tools: <https://inkscape.org/> | <https://app.corelvector.com/>
Visual Design Tools: <https://piktochart.com/> | <https://www.canva.com/>

Activity Plan

PHASE 1: Focusing on visual grammar of interpretive graphics

view [presentation.pdf] **use** [draganddrop.ppt]

Step 1: Understanding interpretive communication function of instructional graphics
#instructional graphics #communication functions #interpretive communication function

Step 2: Understanding VisDNA, visual components and visual encodings through examples
#visual components #visual encodings

Step 3: Analyzing *transmission of nerve impulse** in terms of visual grammar and drafting
#generating content #determining the visual components and encodings for visual creation

Step 4: Creating a quick interpretive graphics about *how eye see** by using drag and drop activity.
#generating content #determining the visual components and encodings for visual creation

PHASE 2: Creating interpretive graphics by focusing on visual grammar

Step 1: Drawing *transmission of nerve impulse** in vector
#using pen tool in vector drawing #coloring the drawing #using text tool
use [vector drawing tool] **view** [presentation.pdf/slide: 10]

Step 2: Creating a one block interpretive graphic which depicts *transmission of nerve impulse**
#applying visual components according to visual encodings
use [vector drawing tool] **OR** [visual design tool]

Step 3: Explaining the visual components and justifying the visual encodings applied.
#analyzing the graphic in terms of VisDNA

* The topic can be changed. While choosing the topic, it should be noted that a process is being conveyed and that the process takes place in line with the relations between the components.

PHASE 3: (Optional) Creating multiblock interpretive graphic

Through this phase learners will practice on applying visual encodings on a more complex content.

Step 1: Expand the content and visual explanations.

Step 2: Drawing in vectors of the additional visuals and exporting them.
[vector drawing tool]

Step 3: Creating a more complex multiblock infographic by applying visual encodings.
[visual design tool]

