About the chart - Scatter: assesses the relationship between two numeric variables, with optional coloring by group/category.

Graphics environment setup and color palette.

# installation   
#install.packages("daltoolbox")  
  
# loading DAL  
library(daltoolbox)

library(ggplot2)  
library(RColorBrewer)  
  
# color palette  
colors <- brewer.pal(4, 'Set1')  
  
# setting the font size for all charts  
font <- theme(text = element\_text(size=16))

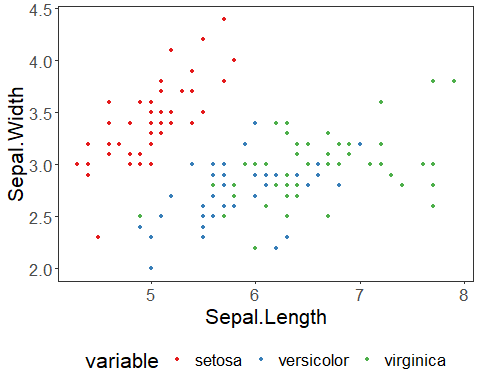
Sample data (iris) for the chart.

# iris dataset for the example  
head(iris)

## Sepal.Length Sepal.Width Petal.Length Petal.Width Species  
## 1 5.1 3.5 1.4 0.2 setosa  
## 2 4.9 3.0 1.4 0.2 setosa  
## 3 4.7 3.2 1.3 0.2 setosa  
## 4 4.6 3.1 1.5 0.2 setosa  
## 5 5.0 3.6 1.4 0.2 setosa  
## 6 5.4 3.9 1.7 0.4 setosa

Build a scatter plot: select and rename columns to x, value (y), and variable (color).

# Scatter plot  
  
# Used to visualize the relationship between two numeric variables.  
# The first selected column is treated as X (independent) and the second as Y (dependent);  
# a third categorical variable can color the points.  
  
# The color vector must match the number of levels/groups.  
  
# More info: https://en.wikipedia.org/wiki/Scatter\_plot  
  
library(dplyr)  
  
grf <- plot\_scatter(  
 iris |> dplyr::select(x = Sepal.Length, value = Sepal.Width, variable = Species),  
 label\_x = "Sepal.Length", # X-axis label  
 label\_y = "Sepal.Width", # Y-axis label  
 colors=colors[1:3] # one color per Species level  
) + font  
plot(grf)



References - Cleveland, W. S. (1994). The Elements of Graphing Data (2nd ed.). Hobart Press. - Wickham, H. (2016). ggplot2: Elegant Graphics for Data Analysis. Springer.