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# A short guide to visuals in your writing for Postgraduate Taught students



# Using Visuals

## Introduction

**How do you go about using visual illustrations such as figures, tables and other materials in your academic writing? This guide will give you some tips on effective ways of using visual illustrations in your essays. If you want more specifics on how to reference your visuals in the text, you will need the companion ASC guide, *Short Guide to referencing figures and tables* (University of Birmingham, 2015).**

### **School guidelines**

The first thing to say is that you need to check whether you are allowed to use visual material in your essays. As a generalisation, you will be encouraged to use visual material in the social sciences, sciences and technologies, but may not always be encouraged to use such materials in arts and humanities. It depends on your subject discipline and the practices in your Department or School.

You will usually be allowed to use visual materials in your project or dissertation, whatever the discipline. Here are a few general tips to help you to confidently use tables and figures in your academic writing.

### **Guidelines – a health warning**

This Guide aims to complement whatever you get told by individual lecturers. Written advice in module guides or your Student Handbook and guidance from within your School always takes priority over this general guide to good practice.

### **Creating your visuals**

You may be creating your visuals yourself, or you might want to use something that you found on the web and adapt it. There is lots of useful advice on creating your visuals in such sources as Chivers and Shoolbred (2007) and LearnHigher (2014). The message in both these documents is that however you create your visuals, aim to keep them simple.

## Examples

Week Commencing	1 - 5 Aug	8 - 12 Aug	15 - 19 Aug	22 - 26 Aug	29 - 2nd Sep	5 - 9 Sep	12 - 16 Sep	19 - 23 Sep
<b>Stages of Information Audit</b>								
Planning								
Data Collection								
Data Analysis								
Evaluation								
Communicating Recommendations								
Implementing Recommendations								
Evaluation								

**Figure 1. First stage of audit**  
(Source: Personal collection)



**Figure 2. UK road fatalities** (Source: Personal collection)

### Tables and figures

Visuals are normally divided into two categories for use in your writing.

**Tables** in this context are text or data created by a software package such as Microsoft Word™ or Excel™.

**Figures** are everything else, for instance pictures, drawings, scanned material, photographs, charts, graphs, and so on.

In some schools, the guideline might be that all visual materials should be gathered together and simply known as 'Figures'.

### Labelling your tables and figures

Unless you are told to the contrary, tables should be labelled sequentially as Table 1, Table 2, Table 3 etc.

Everything else is labelled sequentially as Figure 1, Figure 2, Figure 3 etc.



**Figure 3. Stopcock** (Joydeep cc BY 3.0)

The caption is normally placed under the figure or table. However individual practice in some schools may vary.

## Six great tips on graphs and charts

### 1. Always give a clear indicative title

The title needs to indicate content. It does not need to be eye-catching.

#### Example:

Head Angle (°)	Equation of regression line	R <sup>2</sup>	√R <sup>2</sup>
0	$y = 1.1997x - 0.0110$	0.9941	0.9970
22.5	$y = 1.7149x - 0.1548$	0.9953	0.9976
45	$y = 2.0236x - 0.0862$	0.9963	0.9981
67.5	$y = 1.7149x - 0.1548$	0.9953	0.9976
90	$y = 1.2496x - 0.3414$	0.9906	0.9953
112.5	$y = 0.8741x - 0.2248$	0.9907	0.9953
135	$y = 0.6933x - 0.1786$	0.9913	0.9956
157.5	$y = 0.8359x - 0.1762$	0.9932	0.9966
180	$y = 1.1615x - 0.4224$	0.9825	0.9912

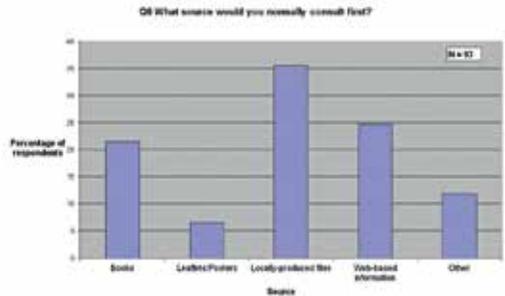
**Table 1. The equations and R-values of the regression lines seen in Figure 4. (Frei, 2012)**

### 2. Save the reader's time by being specific

Make sure that any reference to percentages always includes the specific number referred to eg, '25% of what?'. The normal shorthand is N= number. For instance, N=93 (where the study refers to 93 respondents).

Label both the X and Y axes of a graph, so it is completely clear what is being shown in graphical format.

#### Example:

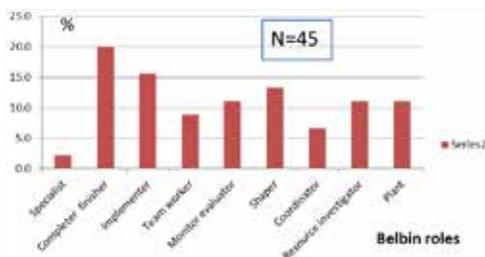


**Figure 4. Q6: Which source would you normally consult first?** (Source: Personal collection)

### 3. Keep it simple

If you try to get graphs and charts to do too much, you can easily end up with an overcomplicated mess. Several clear charts are always better than one overcomplicated chart.

The examples on the next page attempt to display the minimal amount of information.

**Example:****Figure 5. Belbin roles**

(Source: Personal collection)

In terms of simplicity, a table can sometimes be just as effective as a graph or chart, as the following example shows.

Dial (°C)	100	200	250	300	350	400	450	500	600	700	800
Camera (°C)	24	57	83	113	149	190	238	290	413	557	724

**Table 2 Calibration of furnace results table** (Duncan, 2012)**4. Do the figures and tables agree with the text?**

It might sound an obvious point.

But always make sure that your tables and charts are created from the final version of the data, so that they are current and completely consistent with the text. The aim is to illustrate and simplify, and not confuse.

**5. Refer to work in the text**

When you have gone to a lot of trouble to create tables and figures, it is important to make sure that you use them effectively. So always refer directly to the figure, for instance:

*'Figure 7, above, suggests that...'*

*'Table 4, page 19, is a powerful argument for...'*

*'Figure 17, over page, provides clear evidence that...'*

**6. Learn about the technical aspects of inserting images**

Writing academic text with lots of pictures will often cause layout challenges. Copying figures and charts from one source and pasting them into a Word document can be tricky. If you are not competent in this area, do consider learning from websites such as the Microsoft site, eHow (2014) or simply by looking on YouTube.

The University Digital and Technology Skills Team also run courses for students (University of Birmingham. Library Services, 2015b).

## 7. Make sure that your images are free of copyright problems and adequately referenced

The University of Derby (2015) lists a wide range of search engines to help you find images which have been copyright cleared. These include collections of photographs and also copyright-free clip art and the website is a treasure trove of information.



For more about copyright and also referencing your images, see the companion Guide, **A Short Guide to referencing figures and tables for Postgraduate Taught students** (University of Birmingham, 2015a).

### Summary

If you are allowed to use visuals in your documents, they will hugely complement and enhance your text. However, choosing the right visual images in the right place, appropriately formatted, is not straightforward. On the next page, you will find relevant reading. For students in STEM (Science, Technology, Engineering, and Medicine) subjects, material from the University of Bradford (2014) will be especially helpful. Academic Skills Centre. March 2015.



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University of Derby. Library. (2014) **Student copyright guide** [online]. Available from: <http://libguides.derby.ac.uk/content.php?pid=445253&sid=3736284> [Accessed 05 February 2015] [This is one of the best places to look for a wide range of image search engines].

Academic Skills Centre. March 2015.

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