Describing images 1: General principles

Guidance from UKAAF

UK Association for Accessible Formats (UKAAF)

Because format quality matters

Why format quality matters

"When organisations send me information in formats that I can read myself it allows me to be independent, feel informed and appreciated - just like every other customer."
End-user

"Producing consistently high quality accessible formats helps us to maintain our reputation, to gain new customers and to retain existing ones."
Transcription agency

"We are committed to ensuring that our customers with print disabilities receive the same information, of the same quality, as everyone else."
Service provider

Who is this guidance for?

This guidance from the UK Association for Accessible Formats (UKAAF) is primarily aimed at those within education or the workplace who are providing images as part of course materials, their business or presentations. It will be particularly useful in helping to create effective descriptions for blind and partially sighted users. It should be used if materials being provided contain images, or have been adapted with the images removed.

The 'Describing images' series

This document is part of the 'Describing images' series. The series consists of five guidance documents. This first document (G013) contains general principles on describing images and should be read by anyone who describes images for blind or partially sighted people. The other guidance documents in the series explain in more detail how to describe different types of images. If help is needed with describing a particular type of image then the relevant guidance document should also be referred to:

1. General principles (G013)
2. Charts and graphs (G014)
3. Maps, maths and tables (G015)
4. Photographs, illustrations and works of art (G016)
5. Accessible images (G017)

The full set of guidance documents include information on:

- Which images to describe
- How much detail to include
- How to structure a description
- Templates to help you structure your own image descriptions

- How to describe different types of material

- Examples of descriptions of graphs, charts and diagrams, photos, paintings, illustrations and maps

- Examples of descriptions for large print / modified images and tactile diagrams

These guidelines are appropriate for image descriptions in the following formats:

- Print

- Electronic files such as Microsoft Word documents or PDF

- Audio files (such as DAISY)

- Web pages

- E-books

- Presentations

- Accessible images

These guidelines have been updated in collaboration with the Open University (OU) and are an update of the 'Guidelines for describing visual teaching material' (2004). Additional content has been produced by Claire Jones, Assistant Development Officer, (RNIB Centre for Accessible Information) and Emir Forken, Programme Manager, (OU).

Disclaimer

This guidance may include references to external websites, services or products for which UKAAF accepts no responsibility. This information is given without any representation or endorsement of those websites, services or products.

Contents

1   Acknowledgements

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2   Introduction

By obtaining these guidelines you are demonstrating your commitment to helping people with a print disability to read your materials if they find reading standard print materials difficult or impossible.

This guidance concentrates specifically on materials suitable for blind and partially sighted people - such as large print, audio, braille and electronic file formats. However, others with a print

disability, for example with dyslexia or motor-difficulties, may also find such materials necessary.

The provision of accessible information is a key requirement of the Equality Act which service providers must follow, but good customer service and business practice includes communicating with your customers and staff in ways which meet their reading needs. By providing accessible format materials, you not only demonstrate your commitment to equality and inclusion, but also increase your reach and customer base. It therefore makes good business sense.

This guidance will help you and your organisation to incorporate good practice into your business and provide good quality accessible format materials in a timely and appropriate way.

3 About UKAAF

The UK Association for Accessible Formats (UKAAF) is the industry association whose mission is to set standards for accessible formats that meet end-user needs through:

- development, delivery and promotion of codes, standards, and best practice for the production and provision of accessible formats

- consultation and collaboration with transcribers, service providers and users of accessible formats.

Members of UKAAF include organisations and individuals with an interest in the provision of quality accessible formats, such as service providers, transcribers, educators, researchers, print services, publishers, and end-users.

Through its leadership and representation, standards-setting, and by fostering a spirit of cooperation between members, UKAAF ensures that the needs and requirements of end-users are

understood by service providers and transcribers to help improve the quality of accessible formats.

Please see the section on "Where to get further help" towards the end of this document for more information about the benefits of being a member of UKAAF.

4 Definition of print disability

A print-disabled person is anyone for whom a visual, cognitive, or physical disability hinders the ability to read print. This includes all visual impairments, dyslexia, and any physical disabilities that prevent the handling of a physical copy of a print publication. Source: Copyright Licensing Agency Print Disability Licensing Scheme, Guidelines for Licensees 2010.

5 General principles for describing images

5.1 The purpose of describing images

An image description is used to convey the information contained in an image to a person who cannot access it in its original form.

It is essential that blind and partially sighted users receive the same information as their sighted peers. Including an image description will enable users to:

- achieve the learning outcome intended by the author
- participate in discussions based on the information within the image.

5.2 What counts as an image?

Images include graphs, charts, diagrams, photographs, illustrations and artworks. They also include mathematical equations, chemical

formulae, musical notation and special symbols, as a screen reader will not be able to access these to read them aloud.

Many blind and partially sighted readers use screen readers to access electronic materials on screen. Within an electronic document a screen reader will not be able to access an image, so will pass over it. If images on the web do not have alt text, again a screen reader will pass over it; likewise in an audio or DAISY file, the information will be missed unless the image is mentioned in the text.

A person using magnification software to read printed material may struggle to see the details of an image and may only see a small part of an image at a time. An image overview will help them understand what is being shown.

Modified images such as large print and tactile diagrams will need the layout of the image describing before the information within the image can be understood.

5.3 Do all images need describing?

For practical purposes, the answer to this has to be 'no'. There are images which are decorative or summarise information in the text and a description would not add anything of use to a blind or partially sighted user.

An image needs describing if:

- it contains essential information which is not readily accessible anywhere else

- there is data within an image that needs to be conveyed

- there is data within an image which needs to be interpreted

- it is an image used as a basis for discussion

- it is a visual summary of a long section which has no text summary

- it is decided that a caption is needed or the existing caption is not adequate

- it introduces a type of diagram commonly used in the subject area

- it is a modified graphic such as a large print image or tactile diagram

- it has been removed from a transcribed version of a document, so this information is missing

- it is being used to teach how to use a particular type of diagram.

For charts, graphs and diagrams where the image summarises data and other essential information: it is this data and essential information that needs to be described.

For images where a subjective response is required, or if the image is teaching a visual discrimination skill, then the appearance of the image will need to be carefully described.

For modified large print images and tactile diagrams, it is crucial that the layout of the image is described before the features of the image. This will enable a user to understand what features are in the image and what it is showing.

If an image is purely decorative and adds nothing to the text, then a description may not be necessary; or depending on the context a short note for example 'photograph of John Smith' will help a reader who has a small amount of vision to decide whether to spend time studying it with a magnifier.

5.4 Who should write the description?

Ideally, the best person to write descriptions is the author of the material. The author knows the purpose of the image and its importance and can be satisfied that any descriptions contain the intended information.

However, within the publishing chain the author may not see the final image and within education a transcriber or support worker may need to describe existing materials. If this is the case, it is crucial they understand the original intention of the image.

5.5 What kind of description does the image need?

The level of information needed in a description will depend on the context of the image and how it is going to be used.

Due to the extra time needed to read and understand an image, a description needs to be concise:

- A single sentence listing the key features or trends may be sufficient.

- Information from a graph can be effectively written as numerical data, or presented as a table.

- Complex diagrams may need a description that is the equivalent of several pages of text.

5.6 Incorporating image descriptions into a document

You will need to consider where to incorporate a description, as it can be written into the main text or provided as an additional document.

It is important that images reference the original material, by including any page numbers, figure references and titles. If a separate document containing the image descriptions is provided,

this can be in the recipient's preferred format; such as a braille, audio or large print.

Electronic materials: If authoring original material, a description can be written into the main text. Short descriptions can also be written into formatted captions or alternative (alt) text.

Audio materials: Depending on where images appear within the material, a description can be read after an image is first mentioned; or at the end of a chapter. It is important to mark the beginning and end points of an audio description to ensure a blind or partially sighted user can distinguish the original material from information given in addition. A separate audio file that references the images may need to be produced if there are many images and it is felt that descriptions will interrupt the flow of the text too much.

Presentations: Any images given within a presentation will need their data and other key information read aloud to the audience.

Business documents: Any documents containing images, charts and graphs containing data, can be summarised within the text after the image appears; or a separate document produced which references the images can be provided.

Published material: A separate document can be produced which contains the descriptions of the published images. Any references such as image titles, image references and page numbers will need to be included.

Accessible images: These are generally produced separately along with a description. This description may be in a braille, print or audio format to accompany the image.

Educational materials: If an author of a course is not able to write descriptions, they should at least give an indication of the type of

description needed to save unnecessary work later. For example, a note could be attached to each diagram such as:

- Adequately covered in the text or caption.

- Needs a couple of sentences about trends on the graph.

- Understanding of this type of diagram is desirable for communicating with others in this field.

- This diagram is too complex to describe adequately, students are recommended to consult their tutor.

A description can then be written and incorporated according to the format of the materials.

6 Essential image description guidelines

When writing a description, consider the amount of time it takes to study or read – this is often longer for blind or partially sighted users. Aim to create descriptions that are as concise as possible to avoid adding to their workload.

6.1 What is the intended learning outcome?

Having decided that an image needs describing, think about what a person needs to know from it:

- Is understanding the underlying concepts sufficient?

- Is the visual appearance significant? For example, do you expect a reader to be able to reproduce the image or give a subjective opinion?

- Understanding the use of diagrams may be a key skill for an educational course, in which case, its appearance needs to be described in addition to the information it conveys.

Like everybody else, people with a visual impairment have different levels of previous experience. It is sometimes difficult to judge which aspects of an image need to be explained, and which

aspects can be assumed a person is already familiar with. For example, within an educational context, would you expect the student to know already that France is to the south of England?

When writing an image description, decide if it is the data within the image or the appearance of the image which is important.

6.2 If the data within the image is important

It is vital that this data is conveyed. Assess the image to see if only the data is required. If so then give a note of the image title and figure reference followed by the data.

- Give the title or caption of the image.

- Include any image references, so that the description can be linked to the main text.

- Assess the image to see if the description works effectively in an accessible table or a formatted list. This can be an efficient and effective way of presenting data. There is no need to repeat information given in an accessible table in the text. A table is accessible if formatted correctly.

- The data in some charts and tables presents a pattern, which will be visually apparent, for example a graph showing sales over a period of time may show that sales rose rapidly, and then fell briefly during the summer months. These patterns will need to be described in the text. Avoid describing patterns that are not there, likewise it is acceptable to say that there is no pattern showing.

6.3 If the appearance of the image is important

The general approach is to give information in layers of increasing detail, which tells in advance what is coming next. Begin by:

- Giving the title or caption of the image, along with any reference: This will state what the image is.

- Briefly describe the general layout: this can be a short overview of the key features in the image and where they are. This will help the user start to build up an image in their mind.

- Describe the relevant detail: more in-depth detail can be given after the layout has been described. Ensure only relevant details are provided to ensure the description is as concise as possible.

- Finally, describe the story of the image, or what the image is about: If an image demonstrates how something works, for example a diagram of an engine; provide this information after the layout of the image. This information will be easier to understand once the layout of the image has been understood.

In both cases, if it is a complex diagram, state how long the description is and how each part of the diagram relates to the whole. This approach will help users manage the information and decide whether they need to read or listen to all of it.

6.4 Terminology in a description

Consider the context. Link the description to the text by including details referred to in the main text or business / course materials.

There is no need to repeat information from the figure caption or image title, although it is sometimes helpful to refer to this in a long or complex description. However, if the image caption or title is part of the image file and cannot be accessed by a screen reader; then the caption will need to be repeated.

For the wording itself, be aware of using visual concepts such as foreground and background, as these may have little meaning for some people without sight.

Depending on the context of the image it may be appropriate to describe a person's race – this may be important in religious education.

6.5 Consider whether to add additional information to a description

This is something that people writing descriptions may do without realising it: in trying to explain an image they may add information that is not in the text or in the image. Disability discrimination law within education does allow you to treat disabled students more favourably in some cases; so offering additional explanation may be very useful, but be careful not to provide answers if you are producing assessment materials.

6.6 Describe only what is visible

This is slightly different from adding additional information and can be difficult to achieve. For example a photograph of a landscape could be said to have been 'taken on a nice day', but would be better described as 'showing a cloudless blue sky.'

To some extent all descriptions are subjective, and depend on the common understanding of concepts between the describer and the user.

6.7 Use templates if available

For common types of diagram such as line graphs and pie charts, the use of templates speeds up the description writing process and produces standard descriptions. These guidelines provide sample templates and include text indicators [Start of description] and [End of description], which can be used if the description is separate or additional information to the main text. These are particularly useful when accompanying audio formats.

6.8 Think about how a screen reader program might read your description

Users can set preferences for the level of punctuation that is read out by a screen reader, so it is good practice to use simple things like commas, inverted commas, quote marks, question marks and so on, as these help the synthesiser to use correct intonation. Avoid symbols that may be interpreted differently or ignored completely on different systems such as smart quotes and special characters. Use words for these, for example 'pi' instead of 'π'.

Ordinary numbers can be written as digits, for example '10', '435' but avoid combinations of letters and numbers, for example, write 'eighteen hundreds' rather than '1800s'.

6.9 Describing a series of images

You may need to describe a series of images that are very similar and have to decide how much information to repeat each time. For example, blind and partially sighted students often study smaller chunks of material than authors expect, as it can take them longer to study and they may need frequent breaks. This means that there is more chance of forgetting details between study sessions. They may also find navigating back to a previous image challenging. If the same type of image is used throughout a study block, you can refer to previous descriptions, for example 'Figure 3.2 is the same as figure 3.1, with the addition of an arrow from the box labelled 'fish' leading to a new box labelled 'swim'.' However, if there is significant other material between the two, particularly if it doesn't simply follow a thread, then describe the whole of the new image, making a judgement as to how much detail to repeat.

6.10 Using tables in descriptions

Users can make use of features in some screen reader programs that allow reading of tables formatted in Microsoft Word cell by cell, stepping through in any direction. They also have the option to read the row and column headings for each cell.

A table is often the most efficient way of describing detailed data in diagrams such as bar charts or line graphs. It is essential information if users are expected to read values and manipulate data rather than review broad trends.

If you have the data from which a figure has been drawn, you should include this as a table, simplified if necessary so that users get the same information as someone reading the figure visually.

6.11 Using captions and alternative text

Some document formats can have formatted captions or alternative (alt) text added to the image. These can be a short sentence that either gives the title of the image or states simply what the image shows.

7   Image description examples

Two examples of image descriptions are provided here. For further examples please refer to the specific in-depth guidance document that covers the type of image you are describing.

7.1 Bar graph example

This bar graph and description has been adapted from a research report investigating audio description (by Rai S, RNIB, 2009). As it is a research report, it is the information rather than the appearance of the graph which is important.

 [Start of example]
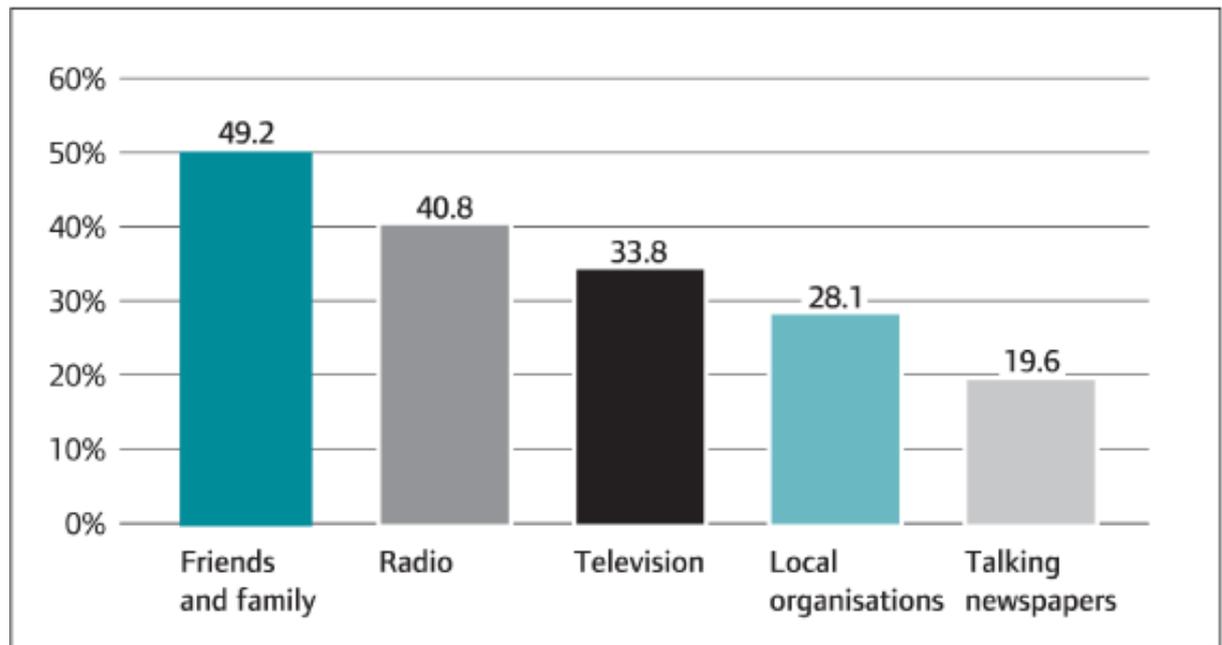
Figure 1: Top five sources of information

Figure 1 shows the top five sources of information for products and / or services for blind and partially sighted people chosen by respondents in this study as a bar chart. In decreasing order these were:

- 49.2 per cent reported family and friends
- 40.8 per cent reported radio
- 33.8 per cent reported television
- 28.1 per cent reported local organisations
- 19.6 per cent reported talking newspapers

[End of example]

(Image and text adapted from Rai S, 2009, p54)

7.1.1   How this bar graph has been described

- The caption states briefly what the bar graph is showing.
- The opening line of the description gives an overview of the information in the bar graph, including the order the information is presented in.

- The data is broken down and given as a bulleted list. Each bar has its own bullet.

- The appearance of the graph is not relevant in the context of this report, so it is not described. The colour of the bars does not matter: it is the data which is important.

7.2 Pie chart example

This pie chart has been adapted from a research report about audio description (Rai S, 2009, p31–32). It is the data, rather than the chart's appearance which is important.

[Start of example]

The pie chart in Figure 2 and the list of data shows the number of valid interviews that were successfully completed in each region.

Figure 2: Distribution of respondents interviewed according to region
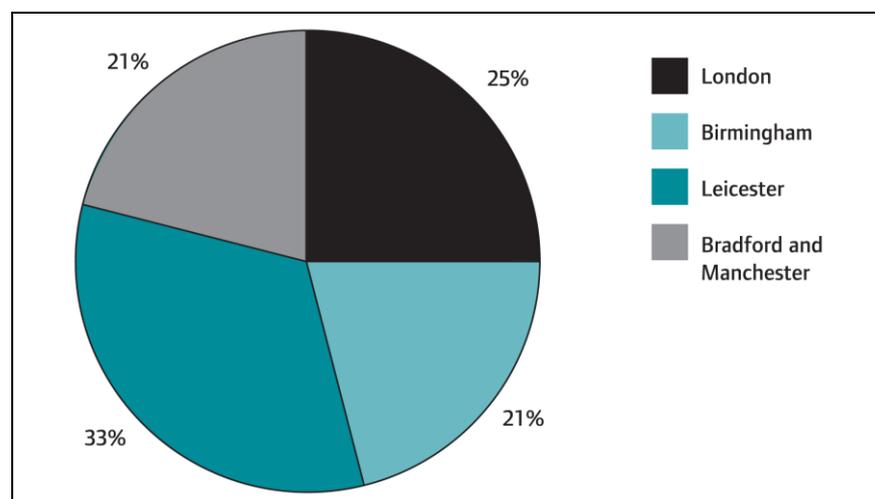
List of data showing distribution of respondents interviewed according to region:

- Leicester 33 per cent

- London 25 per cent

- Birmingham 21 per cent

- Bradford and Manchester 21 per cent.

The number of interviews conducted in Leicester was relatively high compared with other regions. This was primarily because of the co-operation of a community centre which offered a wide range of activities for blind and partially sighted people. Leicester is home to one of the largest Indian communities living outside India. Figures obtained from Leicester City Council (2009) count 72,000 Indian residents amongst its population, the highest for any single area in the UK.

[End of example]

(Text and image adapted from Rai S, 2009, p31–32)

7.2.1   How this pie chart has been described

- The pie chart and the list of data have been introduced in the text by giving a brief overview of the purpose of the data.

- An accessible table is not required as there is a small amount data. This is effectively presented as a list. This has an introductory sentence, similar to the title of the pie chart, explaining what the data means.

- A paragraph follows the pie chart and list which discusses the data in more depth.

8   Where to get further help

UKAAF assists businesses and organisations by advising how to meet the needs of customers and clients with print disabilities; providing guidance on how to source and provide quality accessible formats like large print, audio, braille, electronic file formats and Easy Read; and helping you to understand your responsibilities as a service provider.

Through our website and magazine, members will also gain access to:

- findings from public consultations and end-user research

- research and innovation in accessible formats

- information on suppliers of transcription services

- guidance and advice on standards for accessible formats

- opportunities to review and help to develop standards and guidance.

In addition to supporting service providers and transcribers, UKAAF also represents people with print disabilities. We believe that because format quality matters, end-users should have genuine input into the development of standards for accessible information. By collecting and sharing users' views with service providers and transcribers we can help them to deliver a quality service which meets users' needs.

UKAAF has a User Advisory Group (UAG) so we can include blind and partially sighted people and others with print disabilities in ongoing research and consultation on key accessible format issues.

There are many benefits of being a member of UKAAF, not least to demonstrate your commitment to quality accessible formats. For more information visit us at www.ukaaf.org.

9 Your feedback is welcome

We would welcome your views on this guidance, any suggestions for additions, or case studies of how this guidance has helped you. You might like to share your experience in an article in our magazine 'Format Matters'.

You can phone, email or write to us - our details are at the back, or use the feedback form on our website www.ukaaf.org.

If you find UKAAF's guidance valuable, please encourage others to join by visiting our website.

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Notes

Notes

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