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Introduction

This resource is based upon the expertise and experience of Mexican NGO **Ojos que Sienten A.C / Ojos Que Sienten A.C / Sight of Emotion** and UK-based international Charity **PhotoVoice**, with specific reference to two projects, *Beyond Sight* and *Sights Unseen*, run in partnership between the two organisations.

This resource is intended to provide an understanding of the concept of sensory photography, and some of the methods and techniques required to enable partially sighted and blind people to use photography as a tool of communication, self-expression and advocacy. The needs, concerns and priorities of different individuals and projects will vary and this guide aims to raise considerations and make suggestions rather than providing a 'one size fits all' project template.

The development of sensory photography methodology is still very much a work in progress, and any project is likely to adapt and refine techniques in light of the particular needs and aims of its participants. We hope, however, that the information provided will convince you of the value of photography to the blind and partially sighted, and leave you confident as to how to work with individuals and groups safely, effectively and sensitively.

Issues faced by blind and partially sighted people

Worldwide more than 161 million people are visually disabled. 124 million have low vision, and 37 million are blind, although contrary to popular understanding only around four per cent of blind and partially sighted people have no useful vision at all. In the developing world, poverty underlines not only the causes but the perpetuation of the ill health that leads to blindness. Worldwide 75% of blindness is avoidable through prevention and treatment, yet effective treatment is not reaching many of the people who need it most. For many blind and partially sighted people their disability affects their lives in a number of ways. Dr. Buffa Hanse wrote in *The Braille Monitor*, "The social stigma of blindness is the most significant problem, not the loss of sight".

- Those people suffering from a disability tend to be the poorest in society with many living on less than one dollar a day.
- Lack of understanding and knowledge of blindness can cause irrational prejudice towards those with visual impairment, in turn leading to social isolation.
- Most blind and partially sighted people of working age are not in employment and many employers say it would be difficult, if not impossible, to employ someone with sight problems.
- In many countries blind people experience social marginalisation and prejudice due to a lack of understanding and knowledge around blindness and the rights of the visually disabled.
- People who have sight problems can feel isolated and unable to communicate or engage with an increasingly visually-focused world.

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Why would blind and partially sighted people want to take photographs?

The later sections of this resource detail how the medium of photography can be made accessible to blind and partially sighted people, however the question most often levelled at practitioners both by prospective participants and the wider public is not 'how', but 'why' anyone who cannot see would wish to create photographs?

Central to any response to this question must be an understanding that photography is not just the creation of a visual product, but a communicative process that involves all the senses and whose key enabling purpose is as a tool for analysis of ourselves and dialogue with others. Photography is a tool that enables us to talk to each other and allows us to experience the world from different perspectives. Photographers, regardless of their visual abilities, take photographs to explore, acknowledge, document and communicate. The shutter is pressed not only because of what we see but because of what we feel, and because we have something we want to commemorate or express. This potential of photography exists for everyone.

1. Because they want to.

Photography is fun, accessible, sociable and satisfying. It is a way to express, record, affect and analyse, and it remains one of the most prolific and popular mediums of the modern age. The sharing of photos through albums, email, social networking sites and mobile phones is something many people take for granted, despite the fact that they would not describe themselves as 'photographers'. Photographs forge connections between people, even over distance, acting as a focus for discussion and a prompt for positive reminiscing. As well as taking photographs, most people find themselves interacting with photographs hundreds of times a day as they go about their normal routine. Being denied access to this aspect of society can be isolating, and can compound feelings of powerlessness. Many blind and partially sighted people are, therefore, excited to have the opportunity to take pictures and get involved in the visual world – a world they might previously have been excluded from.

2. Because they can.

Although it is not commonly known, there are a number of highly regarded professional photographers throughout the world who are blind or partially sighted, and many more enthusiastic amateurs who overcome their lack of sight to capture fantastic photographs to share with friends, family and public audiences.

Sight, for photographers who can see, becomes their principal working tool, to recognise and interpret the objects that surround them. It is for this reason that photography is considered a visual art. However, photography is more than just a visual art - it requires a process of identification, reaction and creation, regardless of what senses are used to achieve this. Blind photographers use senses in addition to and other than sight to create images. Touch, smell and sound are used to discover subjects, understand the impact of distance, and frame shots. Furthermore, partially sighted people often utilise what sight they have extremely effectively, and with an attention to visual details that fully sighted people would not necessarily demonstrate.

3. To communicate

The great power and potential of any creative undertaking is to engage and create a dialogue with an audience. The photographic medium is used to communicate something, regardless of whether the photographer can see or not, and a key element to photography is the emotions involved at the very moment the image was taken.

The language of images has become so strong, that by producing and sharing a photograph you naturally start a dialogue. For the blind and partially sighted, who have a limited ability to view the final images they create, sharing their photographs and having others respond to them is an essential part of the photographic process. It can be immensely rewarding for a blind or partially sighted photographer when someone describes what they see in their images back to them, and a dialogue that enables the photographer to share their perspective of the world ensues.

For blind or partially sighted people, therefore, photography goes beyond its technical and visual aspects. It is about a process of creation, expression and communication that can help address feelings of isolation and provide the means to engage in society, as well as creating a forum for dialogue between the seeing and non seeing world. The very concept of photography by blind and partially sighted people provides an opportunity to explore ideas around vision, blindness, sensory experience and imagery, and to create the means for dialogue and understanding between blind people, partially sighted people and sighted people.

4. To challenge perceptions

Many of the participants in the projects run by PhotoVoice and Ojos Que Sienten A.C / Sight of Emotion have expressed delight in the fact that they are doing something that many people would not think possible. Photography is so absolutely entwined with the idea of 'seeing' in most people's minds that the concept of blind and partially sighted people taking photographs challenges their deepest preconceptions about what the partially sighted are capable of and what it means to 'see'. The common perception is that sight is of paramount importance in life, and projects allow partially sighted people to demonstrate the possibilities of different ways of seeing and the capacity of our other senses. It can be extremely satisfying for participants who wish to escape from the 'disabled' tag to show that they can create strong visual imagery, and succeed in a creative activity most likely to be considered difficult for them. Enabling participants that want to take control over the kind of imagery that depicts issues around sight loss, and people affected by it, is significant. Stereotypes of blind or partially sighted people often focus on the most visible signifiers such as the white cane, the dark glasses and the guide dog, and overlook the diversity of conditions, causes and levels of sight loss, while imagery associated with information about eye health is often focused on emphasising the debilitating loss of an essential sense, rather than portraying the reality of life continuing without it.

Communicating the concept

One of the challenges faced when running a photography project with blind and partially sighted people is explaining the concept. For many people the mind rebels at the idea of blind people creating visual imagery, and it can sometimes be a barrier to the project's acceptance by partner organisations, participants and public audiences. It is possible for the project to be seen as gimmicky or pointless, and it is important to overcome this rather than play on the 'shock value' of the concept to attract attention.

Things to remember when explaining the concept:

- Emphasise the details and value of the photographic 'process', rather than the 'product'. Newcomers to the concept may be overlooking the process and simply wondering what value the actual photographs can have, and how they can be of good quality. Emphasise that the photographers achieve results using what they have (the other senses) rather than despite lacking sight.
- Use case studies of blind and partially sighted photographers and quotes from them or project participants if possible, showing it is an existing and active field. This is the most quick and effective way to demonstrate the possibilities and potential.
- Emphasise the role of photography as a social medium for recording reality, commemorating life, communicating events and attitudes, and prompting discussion, rather than being a purely aesthetic visual medium.
- Highlight how prevalent photography is throughout all aspects of society, and how isolating it can be to be excluded from this. By producing and sharing images, blind and partially sighted people can participate in this visual dialogue and gain a new and powerful way to communicate.
- Explain the ways photography can be made accessible to blind and partially sighted people as well as created by them – audio descriptions, tactile diagrams, magnification etc. Ensure it is understood that they can appreciate the medium as well as create it.
- Compare photography to reading a book or listening to radio, highlighting that with both experiences one creates images in the mind, without the use of sight.

Planning and Delivering Workshops

This section covers organisational and practical aspects of designing and running workshops for blind and partially sighted people. It includes ideas for encouraging participation, techniques for overcoming language and visual barriers, practicalities around managing cameras and images, and guidelines for facilitating blind and partially sighted people to capture, edit and caption their photos.

Establishing project aims and objectives

Before developing materials, project activities and workshop plans, it is important to identify the demographic and cultural background of the group. The following factors will impact upon planning and project and workshop design and aims:

- Cultural attitudes to art, participation, being photographed, disability etc
- Age (and particularly if there is a wide age range to cater for)
- The eye conditions / causes of blindness in the group
- Health issues of specific participants that need to be born in mind during the workshops
- Their interests in general
- Their expectations from the course – why they want to learn photography, previous experience of photography or art.

It is important to extensively consult with the participants or the partner organisation and others you are working with to get a feel for what needs, priorities and expectations exist for the project for the different people involved. Before starting it is vital to have open conversations about what those participating want to achieve and get out of it. Differences in opinion can then be addressed and discussed before the project gets underway. At the outset there should be a shared vision of what the project is about and what it is aiming to achieve.

Some projects have chosen to run workshops entirely with people who have a similar level of visual impairment – for example workshops with fully blind participants only, and separate workshops with people who have a certain amount of sight. This can simplify the communication of key concepts and techniques, and avoid potential issues affecting the group dynamic. Other practitioners consider it to be strength to have a mixed group, all of whom are putting sight on the side to explore sensory photography. Mixing people who are blind, visually impaired and even fully sighted can be a powerful way to illustrate that the techniques and thought processes involved in sensory photography are useful and accessible to everyone regardless of their level of sight, not just a way of overcoming a lack of sight.

Equipment

1. Choosing the cameras

When selecting cameras, you will of course have budget considerations that will limit your choice. The 'best quality' camera you can get for your money, however, might not be the most appropriate model for working with blind and partially sighted people. In this resource we have assumed that digital cameras will be used. Compact 35mm cameras can be used, however, and in some cases it may be more straightforward for the participants to master them since they tend to have fewer functions, no internal menus and a more instant shutter release. The downsides are, however, the cost and time delay when developing film, and the fact that the images cannot be displayed on the computer at high brightness and large magnification as digital images can be.

Consider the following factors when selecting a model of camera:

- How easy is it to feel your way around the camera? Are there clear textures or tactile features that can act as markers for those navigating by touch alone?
- Are the controls intuitive by touch – ie are the buttons different sizes and shapes, or in a formation that can be felt easily so as to avoid mixing up buttons with different functions?
- Are key features of the camera reliant on internal menus displayed on the camera screen? If so these will not be accessible to blind people who cannot see the screen. The more that can be controlled by buttons and dials on the body of the camera the better.
- Does the camera make noises at key points – being turned on, taking a photo, changing function etc? This is vital, and the louder the better.
- How big is the screen? Although the techniques described later do not involve the use of the screen or a viewfinder, when the participants start to use the cameras independently those with some sight will benefit from a large screen that will allow them to review their photographs to some extent.
- The bigger the body of the camera, and the larger the spaces between controls and features, the better.
- Consider downloading of the images – is it easy to plug the cable in without sight, or to remove the memory card for insertion into a card reader and replace it correctly afterwards?

2. Preparing the Cameras

Whatever model of camera you go for there are a few things you can do to ensure they are as intuitive as possible to use without sight.

- Ensure all settings that can only be changed on the internal menu are pre-set to the optimum values. Eg highest image quality, highest volume, digital zoom disabled, white balance on auto etc.
- Add tactile indicators of the most important features – especially the automatic setting on a mode dial if there is one (as there is no way otherwise to tell what mode on the dial is selected). Tactile stickers are available from the RNIB shop, and can be improvised using sticky tape etc.
- It can be worthwhile covering the screen/viewfinder at the back to ensure that those with partial sight are not tempted to try to use the camera's visual features. This will help participants commit to the process and maximise the sensory photography techniques. Ensure the piece of card or plastic used to cover the screen can be easily lifted in order to access the menu or check settings if required. Sticky tape at the top and bottom will usually allow one edge to be peeled and replaced as required.

Workshop Considerations

1. Developing confidence

When beginning to work with photography and blind and partially sighted people, it is important to consider the emotional wellbeing of participants. For many participants, learning to take pictures will push them out of their comfort zones as they embark on developing a skill that they may feel many people would think inappropriate and pointless for them to explore. The act of learning photography can for some feel like a confrontational or rebellious act, and although many will relish this aspect of the process for the way it challenges people's assumptions about their abilities, others may feel worried about the reaction other people will have. This can have a profound impact on the group and it is important to encourage and support participants to have the confidence to take a risk, explore and have fun. Learning to use the cameras will be challenging for some participants and they may get frustrated or disheartened at various points. It is essential that the facilitators work to build the confidence of participants and to create a group dynamic where people can support and encourage each other. Support of peers can be just as important as the support of facilitators.

It is important to clarify for the participants early on that the purpose of the course is not to put together a group of professional blind and partially sighted photographers, but to give them the means to creatively

explore, document, tell their stories and have fun with photography. These projects are about enabling each participant to find their 'photographic voice' and supporting them to decide what they want to use their photography and images for. Rather than the emphasis being on the actual images produced and visual aesthetics the focus should be on the process of taking, creating and communicating with images.

The key role of the facilitators in the early stages of the workshops is to help participants to feel confident and empowered enough to engage in the process, which may involve countering feelings of discomfort and disillusionment among participants when the results are discussed and they cannot see them. For more general guidance for planning and facilitating effective photography workshops please see the PhotoVoice Manual (available from www.photovoice.org).

One way to inspire and develop the enthusiasm is by introducing the group to the work of blind and partially sighted professional photographers such as Evgen Bavcar, Flo Fox, Gerardo Nigenda and Eladio Reyes, or other blind and partially sighted photographers relevant to the group. Use the links section to learn more about these and other partially sighted photographers, and to access photographs and information to use in workshops. Partially sighted and blind facilitators or visiting speakers can also be powerful advocates within the group with first-hand testimonies about the value and potential of the process.

Having worked on team building with the group to ensure there is a sense of trust and respect, it is important to introduce participants to the cameras as soon as possible and start introducing exercises concentrated on using their senses. This way the focus will be more on what they do have and less on what they are worried they lack. This ensures that early on the camera is demystified and the participants become more confident to develop their photography.

Remember that some of the participants may have experience of photography or other creative mediums they can bring to the group – perhaps from before their sight deteriorated or perhaps because they have ongoing interests in other art or creative forms. Ask for input and detail of previous experience to focus examples or comparisons, rather than assuming that you are bringing a new concept to all the participants.

Also see the **Describing the Camera** section.

2. Facilitation

- Ensure there is sufficient support for the number of participants – ideally one facilitator for each four participants. More support may be preferable in the first few workshops when all the participants will benefit from one-on-one support as they explore the camera and shooting techniques for the first time. Ask participants what they feel they need to feel supported and safe. This may change over the course of the workshop and it may also be pertinent to ask individually as well as in the group where some participants may feel embarrassed to admit discomfort or concern.
- Ensure consistency in the facilitation of the workshops so that there is a sense of clear progression and clarity that helps the participants build up a trust in the workshop process rather than having to start from scratch each time.
- Ensure that one facilitator leads all the workshops throughout the course, ensuring that there is no confusion arising from conflicting messages from different facilitators and that one person is responsible for keeping to schedule and moving sessions forward.

3. Group dynamics

- When running a workshop where some of the group have partial sight, it is important to ensure a balance when working in pairs – for example one blind or seriously partially sighted participant, with one sighted person or a less seriously partially sighted person who can move around without a cane or guide dog.
- At the beginning of each workshop start by clearly explaining who is present so that everyone knows without needing to ask. Be sure to highlight if anyone new is visiting the workshops and

explain why they are there, especially ensuring you warn everyone if they will be monitoring, videoing or recording the activities.

4. Before the workshops start: some practical considerations

- Mark the cameras with numbers, both in black and white writing as well as with something tactile such as raised numerals or Braille stickers, to ensure that cameras are not mixed up causing confusion about who took which images.
- Make sure that all cameras have full batteries and memory cards (at least enough memory to store 100 high resolution photographs).
- All cameras must have their own wrist strap, so that the participants can put their hands in them and therefore avoid dropping and damaging them.
- Prepare the workshop space with sensitivity to the fact that the participants are blind and partially sighted – do not leave equipment or furniture around to cause obstacles, and maintain continuity with the layout from workshop to workshop so that participants can develop familiarity with it.

5. Archiving

Establish a clear downloading and storage system such as the example provided (see the **download/archive** section), and ensure everyone in the staff and in the group understands how it works and keeps to it from the first workshop.

6. Length of workshops

Every project will have different priorities and limitations due to cultural factors, aims, intended outputs, and of course the number and vulnerability of the participants. It is important to consider how much time to allow in the project plan for each stage, to ensure that no part of the process is hurried or incomplete when these considerations are factored in.

To give an indication of the amount of time to factor in for various project phases, below are some details of the Sights Unseen project. Hours are after breaks have been deducted.

Training for facilitators (professionals with workshop experience – learning specifically how to deliver sensory photography training): 24 hours (over 4 days)*

UK workshops (run by 4 trainers for 9 first-time participants): 50 hours (10 x 5 hour workshops)*

**It is always valuable to allow more time for all project phases if at all possible, particularly for the training of facilitators. It may be valuable to factor in follow up training at various stages of a project so that concepts can be revisited in light of workshop experiences. It cannot be under-estimated how long it may take to build confidence in working with this methodology, given the 'culture shock' that may be experienced on top of the techniques and processes to be learnt and practised.*

The Workshop Process

Learning to use the camera

It is important to ensure that the participants feel at ease and confident with identifying the different parts of the camera they will be using. At least an hour should be allocated to do this in the first workshop, and where possible participants should have one-on-one support to ensure that they are confident that they have understood correctly before they start to try to use it independently. It is a good idea to revisit the basic controls at the end of the first workshop and at the beginning of the first few workshops, so that participants do not feel left behind because they cannot navigate the controls but feel embarrassed to admit that they are having problems.

Describing the camera

A good way of introducing the camera is for everyone to sit in a circle around the facilitator who will be describing it, with a camera in their hands. So that everyone is experiencing the same thing, and to introduce the concept of 'sensory' photography, anyone with some vision should be asked to close their eyes and navigate entirely by touch as the camera is described to them. The facilitator describing the camera should also close his/her eyes, having become very well acquainted with the camera model beforehand, to ensure that the description makes sense without the aid of sight. If the screen of the camera has been blocked as suggested in the 'preparing cameras' section, it is important at this stage to explain that this is the case and why. It is a good time to explain that sight will not be used at all to take photos using the techniques of Sensory Photography, and that therefore the screen is blocked to avoid the distraction of the visual preview or results.

Guidelines for describing a camera:

- Ensure everyone is holding the camera in the same way to start with – use clear indicators such as the lens, the wrist cord and the shutter release to get everyone holding it the right way up and facing away from them as they would when taking a photo.
- Progress through the parts of the camera moving from one side to another explaining what everything that can be felt along the way is – even if it is unimportant or irrelevant. Do not dart back and forth around the camera or the participant will lose track of where features are in relation to each other.
- Go slowly and have other facilitators watching participants to ensure that everyone is keeping up and has not misunderstood the instructions – confusion at this early stage can lower confidence.
- Don't go into detailed instructions about how to use the features in the first description – concentrate on ensuring participants can navigate the camera and identify the features, then start going through them individually as they are needed, making sure the explanation is not an abstract to them, but linked with the process of exploring through touch. Facilitators and volunteers should get close to the participants and guide them with their hands if needed, to ensure the participants associate the correct parts of the camera with the description they are hearing.
- While going through the features for the first time, ask participants to do some basic things such as turning the camera on and off to familiarise them with the process and the sounds etc. Get the group to shoot a few photos without worrying about what they are capturing purely to get used to the feel of the camera and the sounds and sensations associated with taking a photo.

Early on it is important to go over some good practice guidelines for using the camera:

- Before you start shooting, put the strap/cord around your wrist.
- Turn off the camera when not in use to preserve the batteries.
- Verify, through touch, that the lens isn't closed or that it doesn't have the cap on.
- Remember that touching the lens itself can leave prints that lower the image quality.
- Avoid the camera being left in areas that are wet or very hot or sunny.
- Do not delete images until the editing process.
- Make sure the memory is not full when the camera is taken home.

Sensory Photography Concepts and Techniques

After the participants have been introduced to the camera, an initial stage of 'snapping' will allow the group to become at ease with the idea of photography and confident in using the camera.

Early in the workshops the elements to take into consideration when thinking about the image you want to take are explained to the participants in a way that is easy for them to understand and put into practice.

Key concepts

Framing: Explain that when taking a photograph it is not simply a matter of pointing towards the subject, but of deciding what is included in the photo – all or some of the subject, the subject and the background, the subject and what is above it etc. Tactile diagrams can be a useful reference for this concept. Link to tactile diagrams info

Portrait/landscape: Shooting can be done vertically (portrait) or horizontally (landscape). This can be demonstrated using a mount board window, which can be rotated and felt by the participants. A collection of tactile objects such as toys or fruit can be a good focus for this exercise – the window can be placed by the display in each position and the difference in what is contained in the 'photo' felt through the window.

Foreground / background: This must be explained in a verbal way as well as using their body as a reference. For example you can ask two participants to stand one in front of the other, and then explain who is in the foreground and who is in the background and what that would mean in a photograph (i.e. who would seem more important, more prominent, larger in the frame etc).

Distance: When taking a photograph, it is very important to identify the distance to the subject, in order to be sure that it is framed as desired. This can be done by reaching with or laying out a cane, measuring it with steps, or measuring with the joints, such as hands, wrists, arms and forearms. It is especially important to remind participants that they cannot take a photograph of anything that is closer to them than the distance from the wrist to the elbow (unless using the macro setting). It can be very reassuring for a photographer to know how a photo of a person will be framed if taken from the distance of one cane's length, for example, so that they can increase or decrease this to get exactly the portrait they want, or judge how far to stand away from a different subject such as a statue or tree.

Focus and blur: It is important to clearly identify the area that needs to be in focus. The photographer needs to remember that he/she can communicate different feelings or ideas depending on what is focused on in the photograph. Explaining the blur caused by a lack of focus can be more difficult than explaining motion blur, since it is a purely visual concept.

Here is one way the concept can be explained in a way that makes sense to someone with no sight: When one touches a glass bottle, one identifies the material, its temperature, its dimensions and every detail that makes one recognize the object as a bottle. If this is done again with a thin cloth over the bottle, the details of the bottle won't be recognized so precisely. Nevertheless, one will still know it is a bottle, since some details, like its shape and size, are still recognised. This is what happens when one sees an image that's blurry or out of focus; one recognizes what it is but cannot make out the details clearly.

When the implications of blur are understood, it can be explained that the element of a photograph that draws the attention of the viewer is the **focus** of that image, and that choosing what this is will play a part in determining the impact of the photograph. One aspect of the photograph (the closest person in a group, for example) being in focus and everything else being blurred is one way to ensure that this person will be noticed and considered by the viewer more than the indistinct background.

Movement: The representation of movement in a photograph is a very visual concept and needs to be explained carefully. Fast movement makes subjects appear like streaky shapes - especially if they are close. Movement seen against other movements in differing directions gives a sense of dynamic action,

excitement or confusion. When taking a photograph of a still subject the illusion of movement can be created by moving the camera while pressing the shutter, but if this is not wanted it is important to keep the camera still.

Explaining how the camera captures everything in front of it for the whole time the shutter is open, and therefore how shutter speed affects movement blur, is important. The longer the shutter is open, the further an object may be stretched or spread across the frame. One way to represent the blur of motion in a way that can be felt is to draw a simple picture in sand or sugar on a piece of paper, and then shake it or shift it to the side. The shape will become spread in the direction it was moved and this can be touched by the participants before and after to aid understanding of the visual effect produced.

Light: Light plays an important role in a photograph since it produces different effects, which lead to different feelings in the observer. These effects need to be explained fully to blind or partially sighted photographers who will not necessarily realise the impact of the light on their work until they discover later on that their intended photograph has been ruined.

Flash: If the automatic flash settings are activated on the cameras being used, it is important that the participant knows what impact that will have on the photo. Flash used on a close subject will reflect harshly and cause the background to be much darker and indistinct, and photographs taken of far-off subjects in the dark will simply not come out properly as the flash will not illuminate the subject but the camera will still use a short shutter speed. It can be sensible to take the flash off for any activities or outshoots where it will not be necessary, to ensure it does not ruin good photos by firing unexpectedly. If the photographer knows for sure there will be no flash they can listen for the length of the shutter speed (usually accompanied by a sound effect) and take this into account by steadying the camera or moving back from the subject if required to increase the light captured by the camera and reduce blur.

Backlighting: When the photographer is shooting towards the light source, the objects or people being photographed will appear dark. The photographer will only capture the silhouette, which can be interesting if deliberate. The student must therefore identify where the light source is in relation to the subject. They may do this by asking someone else for orientation or feeling the heat from the sun, or in many cases even fully blind participants will be able to detect the brightness of a light source. Check with the group before designing exercises to deal with light.

Other ideas:

- Try to sense the heat coming from the sun or electric lights. Here you can play around with a lamp, by moving it around the participant, so they can feel the different directions from where the light comes. Just as if it was the sun.
- Learning to identify the shadow. Use lamps to create a shadow of a participant, and help him/her to trace it with a cane in order to gain a better idea of how a shadow is part of a photographed object, and how the angle and strength of light impacts on it.

Holding the camera

- Participants can experiment with different ways to hold the camera and find one that is comfortable for them and helps them get the result they want. The body can be used so that the participant can be confident the camera is straight and steady without the visual confirmation of the image preview on the back of the camera. Some examples of possible techniques are below.
- Use the cane as if it were a tripod, either placing the camera directly on top or with the edge of the camera flat against the top of the cane so that the angle of the shot is clear from the angle of the cane from the floor.
- Holding the camera with the back of the camera against the forehead just above the bridge of the nose ensures that the camera is facing forward and the participant can accurately point it at whatever he/she wants by simply facing it. It is easy to feel if the camera is tilted or crooked against the nose.
- Positioning the camera flat against the chest is a comfortable way to point it directly forward.

- Holding the camera with the right hand and using the left hand for support, forming an L, allows complete control over whether the camera is at an angle or straight.

Reviewing Photos

This is the process of going through the photos taken in or outside the workshops by the participants, opening up discussion about what they wanted to achieve and whether they were successful, talking about problems encountered, and considering how to move forward. The process of reviewing and selecting photos by a single participant can be done with the images on a computer, projected on the wall or with prints. Using a computer or projector will allow the images to be viewed at a larger size, allowing participants who have some sight to be able to see their images. Some may prefer prints which they can hold close to their eyes or use a magnifying glass to examine. Check with the participants what they would prefer. When working with fully blind participants, of course, it is only necessary to select a format that is useful for the sighted facilitator to browse, view and describe the image.

A good starting point when reviewing the images taken by one participant is to start a discussion with them about what they wanted to capture and why, or what they remember about their experience taking photos. This will help the participant to start exploring why they are taking pictures and will allow the facilitator to identify which photographs to concentrate on and which to discard (thus avoiding confusing discussions around photographs the participant may not remember taking because they were simply experimenting with using the camera at the time).

If this discussion does not yield a clear starting point, the facilitator can provide an overview of the different subjects represented in the selection of photos by browsing in thumbnail mode (eg 'some photos of a mossy stone wall, a few photos of some crumpled fabric' etc), so as to remind the photographer of what they captured and allow them to direct the discussion towards the ones they are interested in. The format to avoid is going through each photograph one by one, because whether the photographer is partially sighted and needs to study the image closely, or blind and needs it described in detail, the process can take time and the one-on-one time is more efficiently spent if the review is selective. Of course, if the facilitator spots an incredible photograph that the photographer doesn't mention it may be worth drawing their attention to it, as the photographer is likely to be interested in having created something that is admired by the facilitator or other participants.

A useful exercise when reviewing photographs with a fully blind participant is to guide their hands around the frame of the photo (on screen if you are reviewing on the computer, or around the paper if you are using prints), explaining where elements of the image are in relation to each other and explaining the composition, framing and shapes within it. Using the edges of the paper or screen as references, participants can build a very accurate picture in their minds of how the photo is composed.

Describing photos

For partially sighted participants, and especially for blind participants, hearing their photos described by someone with sight is an essential part of developing and enjoying their photographic skills. This is how they can verify that they have captured what they wanted to, and learn about the impact of their decisions when taking the photograph on the finished product.

When a particular photograph is being reviewed, the starting point should always be the photographer's experience of taking it, and what they intended to communicate or document. They will, however, want to know what impact the photograph alone has on a viewer, and this is important to its success. The facilitator should therefore describe the image itself, and also their thoughts/feelings upon experiencing it visually. It is important to remind the photographer that in the end the photograph will not be isolated from their intention, since they can add a caption to it. If the photograph evokes something very different from

what it is actually saying, this can actually be a strength – as many powerful photographers portfolios demonstrate. The contrast can add to the impact of the photograph.

To build up a complete understanding of a photograph and its impact the following list details a useful process to follow. The photograph being described in the example is below – don't look closely at it until you have read the descriptions, and see if the picture in your mind matches the actual photograph.

1. The overall description of the photo's content

The photograph is taken from above and shows four plastic hands with long elaborately painted nails close together on a tabletop with their fingers reaching up towards the camera.

2. Initial impact of the photo – the tone and emotion it evokes

The photograph is surreal and somewhat unnerving, as the plastic hands are quite realistic and seem to be reaching out at the viewer from out of the tabletop. The photo is quite dark and has a reddish yellow tone which makes it quite unreal and adds to the unease it causes in the viewer. Because the photo is taken so close to the hands the photo seem claustrophobic and a bit scary.

3. The detail of the photo, filling in the detail in the bare-bones structure outlined in 1 and 2.

The four plastic hands are arranged in the centre of the frame at angles to one another. They are all yellowish pink to look like Caucasian skin, and have long nails with squared off ends. The palms of the two hands that are highest in the frame are facing off the top of the frame, so that the tops of the nails are clearly visible where the fingers bend slightly and show them to the camera. The top left hand has a thumbnail painted red and white, and fingernails painted yellow with a black and silver meteor shape, dark blue with a white palm tree shape, black with a white insect, and red with a black design on it that is unclear. The hand on the top right has nails painted gold and orange, with lines on them in black and white like tartan check. The bottom two hands are positioned with palms facing towards each other at an angle, and because the nails are pointed directly up at the camera is difficult to see what the designs painted on them is. It looks like the left hand might not have anything painted on it yet. To the left of the hands the table is quite clear, with a few white objects that might be pots arranged on the pale tabletop. On the right of the hands the table is crowded with small bottles of nail polish with black caps, and strips of paper which once held stickers and now has holes in where they used to be. Between the hands themselves we can see some four small silver objects that glint in the light, and which might be small pairs of nail clippers.



The discussion that occurs when a participant describes the experience they were recording and the viewer describes the photograph and its impact is an important element of the project. The photograph opens a dialogue and communication channel, and the participants are likely to become more motivated, since satisfaction is derived knowing that the image they had created in their mind matches (or interestingly contrasts with) the one they just heard described.



Red Pegasus

By Marco Antonio, Mexico

I felt as if I was falling into a well, and while I was falling I could see a ray of light which got stronger and stronger, little by little. Once you got close to the light, you could see a garden and through the horizon I visualised a Pegasus. This was one of my many dreams that I always wanted to photograph.

When the photographer has a clear idea of what they have achieved with a particular photo, the facilitator can make constructive suggestions for how the photo could be technically improved, or how the photographer could try new techniques to realise their intended photograph. These suggestions, as with any photography tuition, should be seen as opportunities to experiment rather than prescriptive rules to overcome 'errors' demonstrated by the photographs so far. General points such as 'move closer to the subject', or 'be aware that you are currently taking photographs at a slight angle – be careful not to tilt the camera to the left' are useful, whereas suggestions that rely upon visual experience at the time of taking the photograph are not.

Tactile Diagrams

Tactile images are maps formed by raised areas on a flat surface, used in conjunction with detailed verbal descriptions. Tactile images are not exact reproductions of the visual image, but reinterpretations of the visual image into a tactile language. The descriptions that accompany the images guide the user across its surface in a clear and logical way. It is suggested that the narrative begins at one of the image's corners or outer edges. From this starting point, the narrative works inward in an orderly progression. In addition, the narrative will provide a detailed description of the original work.

Tactile images are designed to provide blind and visually impaired people with a reference point that can be accessed independently through touch. Maps, signage and instructional images are well suited to interpretation in this way, however it can also be an interesting way to bring photographs to life for those dependent on senses other than sight. Tactile images can be useful for blind and visually impaired people to gain a clear understanding of the composition of a photograph, which in some cases is where the strength of an image lies. Reliance on descriptions of a photograph from other people can lead to uncertainty that the picture built up in the mind is accurate. Feeling a tactile diagram – with guidance so that the different elements can be identified – can consolidate the precise layout of the frame and lead to interesting discussion about the choices made by the photographer.

It is vitally important to note that a tactile image of a photograph is only understandable if accompanied by an audio guide explaining how to interpret it. Somebody with access to the original image can provide direct guidance. Shapes can represent any number of things and when separated from clues as to their distance, colour, texture etc, cannot be identified by touch alone. When explored once with guidance,

however, a tactile diagram becomes a reference that can be revisited and experienced just as one might revisit a favourite photo in an album.

When providing a guide to interpretation of a tactile diagram, it is important to be as methodical as in the description of the camera (link to Describing the Camera). Start from a clearly identifiable reference point such as the bottom left corner, and work through the diagram without requiring the person accessing it to jump across details. Ensure that for each shape you encounter, you describe what it represents first, then whether it is in the foreground or background, and then the details such as colour, expression and features. Be sure to explain if the subject is cut off by the edge of the frame, so that the shape makes sense. Examples of audio guides for tactile images can be found in the Resources.

Producing tactile images

Tactile images are created by printing black and white designs onto swell paper (also known as microcapsule paper), and then heating it in a tactile image enhancer so that the black areas (which absorb heat faster) raise up and create a relief version of the design.

For further information or support from experts specialising in accessibility tools such as tactile images, see the Links and Resources page for suggestions of suppliers, online information and resources.

Uploading and archiving images

It is vitally important that a system is established and maintained to prevent photos being lost or mixed up in the downloading and storage process. When working with blind or partially sighted participants, however, it is even more important that the photos are stored in a clear and intuitive structure throughout the workshops. The downloading and archiving system provided is only an example, and some adaptations will be necessary depending on the equipment used and the number of staff involved. The most important point to note, however, is that from the beginning of the project all of the photos are stored in one place (compiled in one go from multiple different computers at the end of each workshop if necessary), in a folder with that participant's name. At the end of the workshops the participants will be able to take a CD of all their work.

In case of sharing cameras, a good way of clearly indicating who took each picture is for each participant to take a self portrait as the first photo when they first receive the camera, and then a close up of the chest or hand as their last photo so that a blank frame clearly marks a change of photographer. This works on film and using digital, since in both cases the digital files/negatives will be in the order they were taken.

Captioning

Captioning is a particularly important part of the project when working with partially sighted people, as it ensures that the photograph conveys the experience or story the photographer wants to share. The photo cannot completely represent the experience the photographer was having and wished to record, since it captures the visual alone. The accompanying writing or audio serves to help interpretation of the image and guide discussion of the image in light of the photographer's experience and intentions.

Captioning can be a challenging part of any project, especially if it is scheduled in as a process to be done in one go. Participants may not be used to creative writing and can get frustrated with how long it takes and how tiring it is to put personal thoughts and emotions into words that make sense to someone else. The discussions that are had about photographs throughout the course, however, are often the basis of clear and powerful captions, particularly as they usually take place close to the time the photograph was taken. Recording these discussions with a voice recorder or onto the computer via a microphone can be a great way to stop these stories and explanations being lost along the way. Ensure the participant is aware

that they are being recorded, and revisit the recordings in the captioning phase of the project so that the participant can edit them and change details they have changed their mind about over time.

It is good to build up understanding of captioning and its importance throughout the project, both by giving plenty of examples of captions accompanying photos, and also by encouraging participants to explain their photographs in one-on-one sessions and to the group. A good way to do this is to include a group session at the beginning or end of each workshop in which each participant describes and explains one photo they took since the last workshop to the group. This takes the place of a group viewing of a slideshow that is a common part of each workshop in many photography projects.

Working with sighted and partially sighted facilitators

When working with facilitators including partially sighted and fully sighted people, it is important to work together closely as a team and to be aware of the different ways to communicate and identify what is happening and when. Partially sighted facilitators' personal experience better allows them to explain to sighted facilitators how concepts will be understood by participants with limited or no sight. Having access to this support and guidance can be a boost to the confidence of the fully sighted team members as well, who might otherwise be concerned that they are being unwittingly insensitive or impractical during a workshop.

All facilitators should feel integral to the process and involved in decisions and activities before and during workshops. The different strengths of team members can be recognised and planned around, however if a partially sighted team member wishes to be involved in managing a workshop activity that is always assigned to a sighted facilitator this should be identified and the opportunity created, provided there are no insurmountable constraints. During the workshop planning the assigning of roles to different team members should be a dialogue to ensure that everyone is comfortable stating if they are worried about fulfilling their role, and likewise if they wish to try something different.

When there are partially sighted members of the facilitation team it is particularly important that the preparations for a workshop are thorough so that everyone on the team knows exactly what activities are planned, what the timings are, and what the logistical arrangements are for travel, venue etc in good time. Last minute changes of plan can be stressful for a partially sighted facilitator who may need time to orientate themselves in the space before they are able to lead others in activities.

Specialist & Adaptive Equipment

As well as making customisations to make the cameras more accessible through touch (see above), it is worth exploring what technologies exist that may be useful in workshops to help the participants engage with the concepts and techniques of digital photography. More affordable gadgetry is coming out all the time, so here are just a few examples of technology that is widely available, to give you ideas for what kind of things can be found. In many cases, more technologically minded participants may be able to suggest software and hardware they have already discovered to be useful in their lives.

Computer Accessibility Programmes

If project participants use computers regularly they probably do so with the assistance of an accessibility application designed for blind and partially sighted people. There are many of these programmes, and if you are planning on getting participants to use computers independently for any project activities (downloading photos, reviewing images, writing captions, creating slideshows etc) it is a good idea to check what programmes they are familiar with and ensure the computers in the workshop have them installed. See links and resources for information about specific programs, however they fall into the following basic categories:

Screen Reader software applications read aloud information displayed on a computer monitor screen, to allow independent navigation of documents and programs without the use of sight. The screen reader reads aloud text within a document, and it also reads aloud information within dialog boxes and error messages. Screen Readers also read menu selections and name graphical icons on the desktop.

EG JAWS v4.01 (Job Access With Speech)

This is a powerful screen reader program for people who are blind. It uses an integrated voice synthesizer and your computer's sound card to output the content of your computer screen to speakers. JAWS supports web browsers for internet access, e-mail programs, word processors, spreadsheets, presentation software, web development tools, database management software, and much more.

Screen Magnification software enlarges the viewing area of a computer monitor display. Magnification levels are measured in power levels. Such has 2x (2 power), and can go as high a level as 16x magnification. These are obviously only useful for partially sighted people rather than those who are fully blind, but can be a good way of allowing participants to search image references on the internet, or to allow them to examine their photos in detail without having to master unfamiliar programs that allow zooming in on digital images.

EG Supernova by *Dolphin Computer Access*

Combines magnification, speech and Braille output in one program. This is to benefit individuals and establishments with a range of partially sighted requirements. Fully integrated magnification, speech and Braille.

Text Reader applications (*text-to-speech*) should not be confused with screen readers. Text readers primarily read aloud text as it is keyboarded, and reads aloud text within documents such as e-mails, word processing documents, and other electronic text format. This type of software applications are more likely to be used by people with learning disabilities, people with poor reading abilities, and ESL (English as Second Language).

USB Microscope

These can be bought for about £50, and are quick to install and easy to use. A small handheld tube with a torch at the end is plugged into the USB port of a computer, and can be used to display photos, text or objects at 40x their real size on a computer screen. They can also be used to capture extreme magnifications as stills (although the resolution is fairly low) or create videos. These can be used in the same way as the CCTV machines used by many partially sighted people, but magnify to a greater scale and in colour, and output to whatever screen (or projector) you want to display the result on. This can be a good way for partially sighted people to appreciate prints of their work, and videos can be created showing a photo in high magnification, bit by bit, accompanied by an audio description.

Digital Dictaphones

A great way for participants to make an audio record of their thoughts or intentions when taking a photo. Some cameras have audio captioning functions, although these can be difficult to operate without sight due to the internal camera menus. Sound can also be recorded at the site of a photo shoot, to accompany a photo for an additional sensory element (eg street scene, dog barking, waves etc). If being used for background sound, an additional microphone is a good purchase, as the Dictaphone may only record very close sounds.

When choosing a model of Dictaphone, be sure to choose one which syncs with a computer, as these simply save each recording as a different WAV file which is very useful for working with the audio later.

Tactile diagrams, Swell Paper and Tactile Image Enhancers

See the section on creating and using tactile diagrams under 'describing photos'.

Remote shutter release cables

Although most compact digital cameras will not have a remote shutter release facility, it may be useful to set up an SLR (film or digital) with a cable release so that participants can experiment with self portraiture without assistance or even an audience. Setting up a fairly wide frame and placing a chair to indicate where the subject should be will allow participants to consider how they wish to pose, and to incorporate props if required. This can be a fun and revealing exercise, as the participants will feel in control of how they are portrayed, and then can review with a facilitator (or independently on a computer if not fully blind) how the photograph comes across to an audience.

A set up like this can also allow a camera to be set up and the frame marked out on a background wall with masking tape or similar, so that participants can set up whatever objects, people or scenarios they want to include in the space and know exactly how it will be framed. This enables participants to take studio-style photos without assistance, and the results can be extremely professional even early on in the process. This is a good way of introducing the concept of framing, and a good boost to the confidence of those participants unsure if they can take photographs.

The key thing to remember throughout the project is that there is no need to rely on existing technologies aimed specifically at blind and partially sighted users. Adapting everyday technologies or improvising tools that demonstrate a concept or enable a process can lead to better results, and can be fun and rewarding. Involve the participants in the process of devising solutions.

Ethical Considerations

- Ensure participants are aware of video or audio recording taking place in a workshop and have given their permission, as they may not realise it is taking place unless informed by a facilitator, and will therefore be denied the power of choice.
- Respect boundaries that certain participants may not want to cross for personal reasons – build contingencies into workshops so if there is an activity that a participant feels uncomfortable doing there is an alternative and they are not pressured by facilitators or other participants to go outside their comfort zone until they are ready to. In most cases the lack of pressure will actually help them to feel able to push themselves further.
- When selecting images for public use in exhibitions or media work, be sure to highlight potential consequences around a participant's images entering the public domain. They will rely on your description to make a decision about whether to share photos, and if that description is misleading they could end up unwittingly displaying unflattering photographs, or photographs that reveal details about themselves or others that they would not be comfortable sharing. The key thing is that participants are provided with enough information in order that they can make an informed decision.
- Avoid suggestions that, through any of the activities in the workshops such as those involving blindfolds, fully or partially sighted people can understand what it is like to be blind. Needless to say, this is a simplification that could upset those living with blindness, and the exercises are merely intended to help those people with sight to stop falling back on using it when trying to develop the sensory photography techniques.
- Ensure that the participants and facilitation team have the opportunity to feed back about all aspects of the project in private, so that if there are issues that it is stressful to bring up in the group they are not ignored. Terminology used by some participants or facilitators, for example, may upset or confuse others and if this is recognised it can be directly addressed in a workshop to clarify meaning, and so that group consensus can be reached on the preferred language.

Sample Exercises and Activities

Warm up Games

Warm-up games can be extremely useful ways of getting the group focused in readiness for the workshop, particularly since the general discussion and conversation at the start may lead to those not directly involved in a conversation 'tuning out' and then feeling removed from the group when the activity or teaching starts. They are also good ways to build up a group dynamic and for everyone to get to know each other better.

1. Put some music on (a different participant can choose the track used each workshop) and ask all the participants to close their eyes, and become aware of their breathing, the sound of the music, what they feel and imagine. Afterwards, everyone can in turn describe what came to mind, describing a scene and what it meant to them.
2. One participant or facilitator moves around the room making noises while everyone else tries to take photos of them from where they are without the use of sight. Those with partial sight should close their eyes or be blindfolded if they prefer. The resulting photos are not important but it can be fun to review them at the end – not least because there are always some amusing photos of other participants trying to get their photos!
3. Living Pictures: Participants are asked to 'freeze' in a pose, then the facilitators choose one or two participants to remain frozen, and ask the other participants to gather around them and through touch establish the posture and then suggest a story behind the pose. This can help to get people talking / interpreting stories from a 'frozen image' and can lead to a discussion around pictures as frozen moments in time.
4. "Something you may not know about me". Take it in turns to reveal something to the group (especially good with a group that already know each other). Alternatively, pass sweets around and tell everyone to take as many as they like, up to a maximum of five, and then everyone has to give as many facts about themselves as they have taken sweets.
5. Everyone says a fact about themselves, and the group must decide if it is a lie or not.
6. Zoo. Each participant chooses an animal, and represents it through physical mime and by impersonating the sound. Participants mingle and try to guess which animal the person they meet is representing. You get a point every time you guess correctly and every time someone guesses yours correctly. At the end of the game everyone recounts how many points they built up, and the winner is announced.

Building confidence using the camera

1. Indoors and working in pairs, portraiture can be a great confidence -building exercise early on. The two participants can help each other overcome the initial problems using the camera, and the exercise is fun and helps build group dynamic. Give each pair the task of getting three very different portraits of each participant. Remind them that they can change the angle of the frame (diagonal as well as landscape/portrait), experiment with framing (eg subject in the bottom or to the side rather than in the middle) and try both close-up and wide shots. Remember to announce when half the time is up and they should switch roles, to ensure each has a turn being a model. If anyone is uncomfortable being photographed remember to explain that a portrait doesn't need to include the face – it could be a photograph of a different body part or even some 'symbolic' objects that represent the person.
2. Arrange the group in a circle and place an object or facilitator in the middle for everyone to experiment taking photos of. Facilitators can then monitor the participants and help those who are having problems.
3. Framing: Using a cardboard box to represent the photo, participants can set up a photo using objects and discuss how they are choosing to place them in the frame, and address concepts such as foreground and background by choosing what to place in front or behind. If significant objects are chosen the resulting scene can be photographed and can be an interesting photo in its own right.

Games to practise using the senses

1. Ask the participants to find and photograph as many different textures as they can find in the workshop space, and see at the end who found most. Alternatively, set them a treasure hunt by giving them a list of different textures or materials to find by touch and photograph.

For example:

Materials

- 1) Metal
- 2) Wood
- 3) Plastic

Textures

- 1) Rough
- 2) Smooth
- 3) Sharp
- 4) Fluffy

Shapes and sizes

- 1) Big
- 2) Small
- 3) Round
- 4) Square

Those with some sight can close their eyes or be blindfolded if they are happy to be, to ensure that they experiment using touch rather than relying on sight.

2. Participants choose an emotion and then try to match it with textures/objects that inspire that emotion in them when touched. Some examples of emotions that can be portrayed are:

- Happiness
- Sadness
- Anger
- Peace
- Tranquility
- Freshness
- Tenderness
- Melancholy

3. Write down a list of six textures along with their opposite, and set participants the challenge of taking photos of one pair of opposites each.

1. Soft – hard
2. Cold – hot
3. Smooth – rough
4. Natural – artificial
5. Cheap- expensive
6. Dry – wet

4. Gather a collection of different objects with various distinct smells such as flowers, perfumes, coffee, chocolate, shampoos etc. Put them on a table or pass them around the group, and ask everyone to identify what each is and what they feel or remember when smelling it. Then they must take an object and produce a photograph, using it as the main character, thinking carefully about how they can demonstrate in their photograph what that object means for them.

5. Go out to a street market and ask the participants to use their sense of smell to identify what the stalls are selling and take photos of their favourite things. Once again, those with some sight should close their

eyes or put on a blindfold if they prefer, and there should be plenty of support from facilitators to avoid accidents!

6. Play a piece of music and ask each participant to reflect on what emotions or memories are inspired by it, and then take or plan a photograph that captures this.

7. Go out in the street and ask the participants to take photos of 6 different subjects that they identify through sound, such as cars, a fountain, people talking, traffic lights, birds etc.

Outshoots

It is important that the opportunity is given for participants to use the cameras outside the controlled 'safe space' of the workshop venue during the project, with support from the facilitators and fellow participants. Without this supported experience participants may not build the confidence required to take their cameras out and photograph their experiences between the workshops, which is when the most interesting and revealing photos are likely to be created.

When organizing an outshoot it is a good idea to take suggestions from participants when deciding where to go. This ensures the location is one which participants are enthusiastic about visiting and photographing, and preferably one which they are familiar enough with to have ideas about what to photograph straight away. It is good to select a location that offers a multi-sensory experience, although in good weather any outside location can offer this. Crowded public spaces are best avoided until the participants are very confident about taking photos and being noticed with their cameras. When still developing their skills and confidence the practical challenges presented by a chaotic public space can get in the way of a successful photography outing.

Outshoots must be sufficiently supported, and it is vital that each participant attending is consulted about what support they feel they need to feel safe. Not foreseeing such requirements can lead to wasted time and negative experiences on the day. Factors such as transport to and from the location, breaks for refreshments and toilet visits must be considered and planned in advance.

It is especially easy in outshoots for participants to be steered towards taking particular photos, because they seem like obvious subjects to sighted facilitators or because others in the group choose to do so. It is good to build into the schedule some exercises that encourage participants to experiment with their own ideas and record details specific to their experience. On the other hand, participants may wish to record the surroundings they cannot see, especially as they can then hear those photos described and tally the images they captured with their experience of that moment.

Ideas for personal projects

1) One day in my life

Participants should document one day in their life in a set number of photographs, thinking carefully about what they should capture to reflect what is important or typical to them, and how to do this in a photograph.

2) Explore your body

The participants capture close up details of their body in an abstract way using the macro mode on the camera. This can encourage inventive abstract photography without the need for travel or props, and participants can also consider carefully which parts of their body to photograph and why, which can stimulate interesting thought processes about self image, body-confidence or unique experience of the world.

3) Sound and photographs

The participants go outside and record some sounds (see the equipment section for details of digital sound recorders), which then become the reference for what they photograph. The work can finally be presented alongside these recordings with an explanation of the process.

4) My story

Ask the participants to consider their past experiences and choose a number of significant moments in their lives to date. These can be positive or testing moments, provided they impacted on them in some way.

For each chosen moment, the participant takes a photo that represents it or their feelings about it. It could be a re-enactment of an event or meeting, a significant object from the time, an abstract image that reflects the essence of what happened.

The work is presented as a photo-story with audio or written explanations of the stories behind the photos.

5) Representing visual impairment

By using photographic filters or semi-transparent materials with colours or textures, partially sighted participants can explore ways of representing how the world appears to them, symbolically or actually. For some participants finding ways to communicate to others how they see the world can feel like a significant breakthrough. Silver foil, cling film, bubble wrap, plastic bags, plastic bottles, glasses or plastic beakers are all useful props if it is not convenient to source a selection of filters.

6) Obstacles

Take photos to represent any obstacles you encounter, both physical and mental. These can feed into advocacy projects, where the causes of social or physical obstacles can be highlighted to those who can make a difference, whether that is the local community, service providers or policy makers.

7) Dream Photos

Take photos that represent themes or subjects that arise in your dreams, or that represent your aspirations – realistic or not! This can involve the use of props, costumes or symbolic use of objects. Toys can be used to create dioramas and photographed in close-up for surreal scenes.

Captioning and Creative Writing Exercises

1. Compile some newspapers, magazines, photography books etc, and choose a selection of photos to describe to the group (or put participants in pairs provided that one in the pair can see the photograph to describe it to the other). When everyone has an understanding of the style and content of the photo discuss what it could be saying, or what issue/event it could be depicting, and then when everyone has given their thoughts read the accompanying caption or article out loud. This will help participants to understand the importance of the story behind a photo, and think about how the photo can capture a story or message.
2. Describe/show a photo to the group, and get everyone to make up a caption for it as if they took it – imagining why they took it and what it means to them. Compare the resulting captions and then reveal the real caption and discuss the differences.
3. Interview: Pair up the participants and ask each to describe one of their photographs to the other. The other then interviews them about the photo to ascertain why they took it, what it means to them etc. This could be recorded to capture the content for a caption, or the interviewer can present their findings to the group at the end.

Sharing the Work

Whatever the overall aims of the project, it is important that the format by which the images are shared publicly is accessible to the photographers who created the work being used. Whether the output be a website, an exhibition or a publication it should be designed to ensure it is fully inclusive and accessible to a non-sighted as well as sighted audience.,

Below are guidelines for a number of different options for image dissemination, taking into consideration the specific requirements of work produced by and for blind and partially sighted people.

Exhibitions

An exhibition is a great way to mark the end of a project and celebrate the achievements of those involved, as well as a way to share the work with others. If a project has an advocacy or awareness-raising objective it can be good to separate this from a celebratory event for family and friends which can take the form of a small-scale exhibition or digital presentation of the work in the workshop venue or a community space.

- Whatever the aim of the exhibition, it is an opportunity to showcase not only the work of the photographers, but the various ways that photography can be made accessible to the blind and partially sighted.
- Make prints as large as possible so that partially sighted people can access them as easily as possible.
- Hang a little lower than you might normally, to allow partially sighted people to get up close and examine the images.
- Avoid reflective glass frames – mounted prints or images printed directly onto foamboard or PVC board are preferable and allow the image to be larger and higher impact in the same space.
- Ensure the exhibition space is accessible and can be navigated safely without sight. Remove obstacles and if possible install a tactile trail to guide blind and partially sighted people around the exhibition. This can simply be a strip of rough tape along the wall a little above waist height. Ensure the audio (see below) provides the captions and information in the order they will access them if guided by the tactile trail.
- Provide captions and information in large (at least 14 point, but as big as possible) black and white print, and also in Braille. Place text at the same height as the prints so that visitors can examine it closely without bending down too far, but put the Braille lower to allow visitors to touch it without holding their arms too high. The Braille should be easy to locate from the tactile trail, and in a consistent position.
- Braille is tiring to read when wall mounted, so it is worthwhile printing copies of all the captions and signage as separate booklets for visitors to sit down and read at their own pace.
- Provide audio for the captions and information. The entire exhibition can be put onto one track as an audio tour which people listen to on an MP3 player as they go round, or each photo can have an MP3 player by it with the audio for just that image on it. It can be a nice touch to record the photographers saying their own captions, if they are interested in doing so. Simple battery operated MP3 players can be found cheaply on the internet.
- Staff the exhibition at peak times and for the launch event, so that visitors can be guided around and given assistance as required.
- If using tactile diagrams, these must be accompanied by an audio description (eg on MP3 players) that guides the visitor around the diagram so that they understand what they're feeling. Tactile diagrams need to be firmly fixed to a horizontal flat surface, if possible inclined slightly towards the user, as it is tiring and awkward to feel around them when they are wall mounted. Small tables or pedestals can be used, but ensure these are at a suitable height to be browsed without stooping (or supply chairs), and be sure to clearly indicate that they are there on the audio guide and/or by using textured tape on the floor.

Printed Publications

- If producing a printed book or pamphlet, ensure all text is black and white and no smaller than 14 point. 16 or even 18 point is preferable if there is space.
- Design the layout to be clear and intuitive to navigate – if a partially sighted person is accessing it with the help of CCTV or a magnifier, they may find it difficult to move from one isolated passage of text to the correct next one if it is not a simple, progressive block.
- Braille text is great for those who can read it, however not all blind and partially sighted people will have learned to , and it is expensive to print in bulk. Furthermore, photos do not reproduce well on Braille imprinted paper, and can be damaged if pressed against Braille script when the book is closed. It is more useful to supply the text of a publication in Braille format as a separate insert, which can be supplied to those who require it.
- An accompanying CD-ROM containing the content in HTML format is a simple and affordable way to make a publication more accessible. On the computer this content can be accessed using the same accessibility tools as the internet and basic software packages, including text-to-speech applications, zoom functions, and text contrast options.
- An audio CD containing the content of the publication read out is a good option for blind users, and will avoid the publication being accessible only to those who are proficient with computers. A recording of the publication being read is more pleasant to listen to than auto-generated text-to-speech. The images themselves cannot be included on an audio CD, which means that partially sighted people will rely on the printed publication to view them. A CD-ROM can contain the audio as media files, and a slideshow of the images for partially sighted people to view on-screen at a magnification that suits them. Not all people will be comfortable using computers, however.

Multimedia Outputs

Content designed to be accessed via a computer tends to be more appropriate for blind and partially sighted people, since there are a number of software applications designed to assist them. CD-ROMS can be created and duplicated containing a mixture of multimedia content and HTML pages for this purpose. It is important, however, to ensure that the CD-ROM can be navigated as well as the content accessed. The simplest way to do this is to have an HTML contents page that loads automatically when the CD-ROM is inserted into the computer. This can feature a hyperlinked menu that will be accessible through software programs designed to assist with access to the internet (see Links and Resources). Each hyperlink can open a different piece of multimedia content without closing the original menu page.

Slideshows can be created in a number of applications, including Windows Media Player, iMovie, Powerpoint, Camtasia and lots of free downloadable applications. When creating slideshows for access by a blind and partially sighted audience it is important to include descriptions and captions for the photos as audio, so that even without seeing the images the meaning of the impact of the photographs is conveyed. If creating an audio tour for a physical exhibition this can be used to create a virtual exhibition for online use or CD-ROM/DVD dissemination, by sequencing the images in the slideshow so that they appear at the same time as the relevant audio.

See **Links and Resources** for guidelines for ensuring your web content is fully accessible. In particular, ensure that any images you post online have alternative text descriptions that include the photographer's credit. Including the credit on the image is not sufficient.

Example description of a camera

Camera model used: FUJIFILM, Finepix F480, 4x zoom, 8.2 mega pixels

<http://www.fuji.co.uk/consumer/digital/digital-cameras/advanced-compact/finepix-f480-9915>

Description through touch

To start, picture in your mind that the camera we will be using is rectangular, and will be held with both hands, with the wrist strap of the camera on the right hand side. It is important first of all to put your right hand through the strap, so that you can be confident you will not drop it.

On the back of the camera, you can feel the rectangular shape of the screen, which has a smooth texture surrounded by a raised border. The front of the camera has raised metal shapes, including the circular shape of the lens – almost flat against the camera when it is switched off, and poking out when it is on.

When you are confident you are holding the camera with the front facing forward and the strap over your right wrist, put your right index finger flat across the back of the camera from top to bottom, on the right hand edge. Slide it slowly across the back of the camera towards the left edge. As you go along we will identify the different buttons you will come across.

First on the top right you can feel a raised circle with a rough edge. This circle is a dial that can be turned to change the mode of the camera. It has eight functions for different kinds of photo. We have added a small hard sticker over the 'Automatic' function, and when this is pointing directly to the left so that it lines up with the slightly raised line on the camera beside the wheel, this mode is selected. We will talk about the other functions later in the course, but we will start using automatic mode, so always check the dial is in this position.

Under this dial, you will find another bigger raised circle that has a smaller round button in the middle of it. This small button is the menu button, and when pressed opens up an electronic menu that is displayed on the screen.

The circle around the menu button makes up four buttons, top, bottom, left and right. The button at 9 a clock, to the left of the menu button, turns 'macro' setting on and off. We will talk about this setting later in the course, but it is the setting used to take photographs of objects very close to the camera. At 6 a clock on the circle, below the menu button, there is a button that turns the self timer on and off. Clicking this once means that the next photo will only be taken 10 seconds after pressing the button, and clicking it twice means the next photo will be taken after 2 seconds from pressing the button. Clicking it a third time would turn this function off.

At 3 o'clock, to the right of the menu button, there is a button that selects different flash options. When you click once the red eye function is selected which means that when the flash is used it flashes twice to stop eyes appearing red, click twice and a forced flash option comes up so that the flash will always be used even when not needed, click three times and the suppressed flash option is selected which will mean the flash is never used, and if you click four times, the auto flash will be turned back on. We will talk about which flash option to use in which situation later in the course.

At 12 o'clock, there is a button used to delete photos when they are being displayed on the back of the camera. You will not need to use this, as we can delete photos from the memory card when it is plugged into the computer for downloading photos.

At the bottom right of the back of the camera, below the circle and menu button, there are two small buttons. The one on the right selects 'playback' mode and means that photos are displayed on the screen, and the one on the left turns the display on the screen on and off. If the camera is on, but the lens does not extend and the camera does not take photos, it will be because the camera is in playback mode. Pressing the shutter release button to take a photo will cause the camera to switch back to shooting mode.

The rest of the back of the camera, to the left of the controls we have talked about, is taken up by the screen.

Now that we have finished identifying the back of the camera, we will go through the top of the camera. Slide your right index finger from the far right of the top of the camera towards the left, and you will first feel the shutter release button, which has a smooth metallic texture. Around it is a ring with a little handle pointing towards the front of the camera. This is for the zoom, and if you push it to the right you zoom in to show the subject of the photo bigger and closer up, while pushing left will zoom out. We will talk about using this function later in the course.

If you keep sliding your finger along the top to the left, you will feel a smaller metal button. This is the power button, which turns the camera on and off. When you press this button the camera will make a sound that will let you know it is now on. Also if you extend your left index finger towards the front of the camera when it goes on, you can feel the lens coming out. When you press the button again to turn it off, the lens will go in, and there will be a beep sound, so you know it's off. Let's all press the button twice now, to turn the camera on, and then off again.

If you continue sliding your finger along the top of the camera towards the left, you will find a small area of rough texture. This is the speaker where the sounds come from, and also where the sounds are recorded when the camera is used to video.

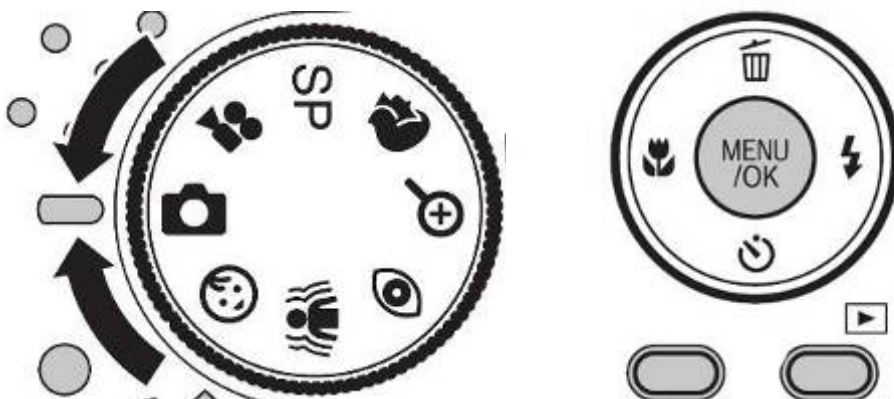
Time to go through the front of the camera. With your right index finger, starting from the right edge towards the left, slide your finger and you will touch a raised metal bar which has the brand name engraved on it, and above this towards the middle of the camera, you will feel a smooth rectangular shape, which is the flash. When taking a photo you should be careful you are not covering the flash. Just under the flash, you will feel another engraved name which says FUJIFILM.

As you continue towards the left edge of the camera, you will come across a big metal circle, which is the lens. Be careful not to block it with your fingers when taking photos, or to touch it when it is extended as you will leave fingerprints on the lens.

On the bottom of the camera you will find in the middle a small circular hole where you can screw the camera to the top of a tripod.

On the right hand side of the camera you will find a rough texture indicating the place where the battery pack and the memory card are held. Pushing this textured panel to the side will release a flap, behind which there is a plastic block inserted into the camera. This is the battery, which can be removed for charging by pushing to one side a small plastic hook on the top. Next to this, you can feel the thin edge of the plastic memory card. This can be removed by pushing it in so that it pops out, and most always be inserted the same way. We will talk more about both the battery and the memory card later in the course.

Next to this textured flap you will find another small plastic cover that covers the socket for the cable that connects the camera to a computer for downloading photos.



Project Case Studies

Beyond Sight took place in 2007 and consisted of workshops in Mexico and the UK with blind and partially sighted participants from a variety of backgrounds. The project culminated in an accessible exhibition at the *Association of Photographers Gallery* in London, which was extremely well received by public and press alike. The exhibition included a number of photographs by professional photographers, made accessible through the use of tactile diagrams and accompanying audio guides and descriptions.



Some participants from the Beyond Sight UK workshops went on to become facilitators in the Sights Unseen project, and two were awarded PhotoVoice bursaries that allowed them to undertake personal photography projects resulting in a joint exhibition in London in 2009.

Mexico Workshops

Since the beginning of 2006 workshops have been run in Mexico by Ojos Que Sienten A.C / Sight of Emotion (Ojos que Sienten), teaching photography to blind adults and children, and sometimes also sighted people so that they become sensitized to the experience of using their other senses. In addition to the workshops, OQS curated an exhibition of photos taken by blind students in the Papalote Museum for Children in Mexico City, alongside the well known international "Dialogue in the Dark" exhibition.

UK Workshops

In May - June 2007 a series of eight photography workshops were held in London for nine participants with visual impairments ranging from slightly impaired vision to complete blindness. Participants were taught to use their other senses to explore the environment, objects and people around them and to capture elements that had meaning to them using a digital camera.

"There is a lot of ignorance out there from people thinking we can't do it when we know differently."
Jane, workshop participant

Sights Unseen, in 2009, consisted of workshops in sensory photography run in London, Mexico and Beijing. The London workshops were held at the *Organisation of Blind Africans and Caribbean (OBAC)*, consisting of two courses of photography workshops and advocacy training. Following the basic photography course the participants were trained in facilitation skills to take on roles as workshop leaders in the next course. Several participants were supported to use their photographic skills to undertake personal advocacy projects tackling issues such as ignorance of the risks to eye health within their community, and barriers faced by the partially sighted.

In China, workshops were held at the headquarters of *Beijing One Plus One Culture Exchanges Centre*, a media organisation run by people with disabilities. The staff of One Plus One were trained in sensory photography and went on to run workshops themselves with partially sighted students at Beijing University. In Mexico, workshops were run by *Ojos Que Sienten A.C / Sight of Emotion* in Mexico City, where participants from the original course took on facilitation roles to train new entrants.

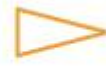
An advertisement featuring a photograph of a rainbow over a landscape with trees and a field. The text is in bold and includes a call to action for eye health.

BELIEVE YOUR EYES Rainbow rings could be warning signs of acute glaucoma. Don't wait for things to get worse.

People of African and Caribbean origin are much more likely to develop glaucoma and diabetic retinopathy. Early treatment can prevent sight loss. For more information about eye health and to see if you are eligible for a free check-up call the RNIB helpline on 0303 123 9999. Click here for more details.

© Adeniyi Ogunsaya / Sight of Emotion / PhotoVoice From Sights Unseen: Sensory photography by blind and visually impaired people

Sensory Photography: Photography for blind and partially sighted people



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