# Visual Aids for Emergencies and Development



unite for children

WASH Visual Aids for Emergencies and Development' was written by Bob Linney.The drawings and photographs are by Health Images, www.healthimages.co.uk, except for the photographs on pages 2, 10 and 16, which are © UNICEF.

June 2012

UNICEF Programme Division / WASH 3 United Nations Plaza New York, NY 10017 USA www.unicef.org/wash/schools

Commentaries represent the personal views of the authors and do not necessarily reflect the positions of the United Nations Children's Fund (UNICEF). The designations employed in this publication and the presentation of the material do not imply on the part of UNICEF the expression of any opinion whatsoever concerning the legal status of any country or territory, or of its authorities or the delimitations of its frontiers.



## Contents

D	Introduction to Visual Aids One-way and multi-way communication Types of visual aids and activities	3
	Making Visual Aids Basic drawing skills Visual literacy and guidelines for design Pretesting or field-testing	. 11 . 13
3	Using the WASH in Schools in Emergencies Flashcards	16

Adapting the WASH in Schools flashcards for the local context ...... 18

References and Endnotes Inside Back Cover

#### Introduction to Visual Aids



Visual aids are a powerful tool for communication and education during an emergency situation and ongoing development, including emergency preparedness activities. Pictures that illustrate water, sanitation and hygiene (WASH) messages can be used to deliver life-saving information, promote learning, encourage discussion and motivate action.

WASH Visual Aids for Emergencies and Development describes a variety of visual aids and activities, and provides tips for making educational pictures – including basic drawing skills, guidelines for design and how to pretest images. It explains how to use visual aids, including the differences between one-way and multi-way communication. And it offers suggestions for using and adapting the WASH in Schools flashcards that complement *Water, Sanitation and Hygiene for Schoolchildren in Emergencies: A Guidebook for Teachers.*<sup>1</sup>

Picture cards and other multi-way communication materials are very useful in helping children and adults understand issues as well as cause-and-effect relationships. Using pictures as a focus for discussion and analysis of WASH themes can facilitate learning and encourage a group to take action. Members of a community in Brazil, for example, used a locally prepared image to prompt discussions about environmental health issues. Afterwards, they organized to cover a large, unsanitary open drain.<sup>2</sup> The WASH in Schools in emergencies flashcards help children and adults understand and practise good hygiene behaviours, and are designed to be used alongside the *Guidebook for Teachers*. The guidebook is a resource for those who are teaching and working with children in emergency preparedness, during an emergency and throughout the recovery period. The flashcards were developed for group activities led by a teacher or facilitator, whose role is to encourage learners' participation. You can find many ideas for interactive activities in the guidebook. Or create your own ways of using the WASH in Schools flashcards in the classroom and in the community.

# One-way and multi-way communication



Clean Toilets for Good Health

Some visual aids, such as simple message posters, are intended for stand-alone communication and do not involve a teacher or facilitator. The viewer is meant to receive information from the visual aid. This is an example of one-way communication.



#### One-way communication

One-way communication is often used in the classroom. It is a didactic method in which the teacher's role is to send out information. The students' role is to passively receive the information; they do not participate actively in the learning session and do not interact with each other. While one-way media such as posters, leaflets and radio broadcasts are effective in large-scale campaigns, interactive visual aids are most appropriate for group learning in schools and communities.



Multi-way communication

Multi-way communication brings learners together to discuss topics of interest to them. Picture cards and discussion starters are designed to be used by a group. A teacher or facilitator helps the group use these visual aids in a participatory and interactive learning process. Both learners and facilitators are actively involved, and all can take part in discussing the topic. There are three basic principles for using visual aids to foster communication and education:

**Start where the learners are**. Recognize their individual levels of skill and capability. Try to develop a spirit of cooperation within the group. Encourage faster learners to help slower students. Make sure everyone can see the picture clearly, then allow learners to hold the picture. Establish that everyone recognizes its different elements and explain artistic conventions that might be difficult to understand.

**Be participatory.** Encourage all learners to be actively involved and try not to talk too much yourself. It is good to sit in a circle so that everyone can see each other. Try not to let the louder, more confident learners dominate the discussion. Give quieter, less confident learners the chance to make an input.

**Be problem-posing.** Use the learning session to develop and strengthen critical thinking. Encourage participants to identify problems that are relevant to them, then work together to find ways to solve them.





Using picture cards in Liberia



#### Types of visual aids and activities

Flashcards, posters and other types of pictures can be used in many different ways. You can use individual pictures as visual aids for learning about WASH issues in a classroom, temporary learning space or community meeting hall. Or use several flashcards/picture cards together to create a wide variety of learning activities.

**Two-pile sorting** – Select pairs of pictures that show contrasts such as healthy and unhealthy behaviour, or 'good' and 'bad' facilities. Mix them together, placing the cards face up. Ask the children to sort the cards into two piles, one for each side of the contrast. Once all the 'good' pictures and 'bad' pictures have been found and sorted, discuss why they belong in that category. Then ask each child to pick a card in one pile and find its 'mate' in the other pile.





**Three-pile sorting** – Select picture cards that show three aspects of a single topic. Place them together and ask the children to separate them into three piles. While they are sorting the cards, encourage discussion about the pictures. An example for learning about safe drinking water is shown at left.

**Sequencing** – Ask children to arrange a selection of cards into a sequence to illustrate a process. The sequence below illustrates how diarrhoea can be transmitted.



**Story cards** – Mix up the cards and ask children to make up a story based on the pictures.



**Before-and-after pictures** – Ask children to suggest what happened to turn the 'before' situation into the 'after' situation.







**Discussion starters** – Select or prepare a picture showing several negative aspects of a situation. Ask open-ended questions to stimulate discussion. Proceed to identifying causes and solutions for the problems in the picture, then work together to develop an action plan to change the situation.



**Cause-and-solution pictures** – You will need one picture that shows the problem and pairs of pictures that show a cause and a solution. Place the 'problem' picture in the centre of a flat surface with space around it. Ask the children to place cards showing the causes around the problem. Then ask them to place the solution pictures next to the corresponding causes.



#### Educational games -

Creative and age-appropriate activities help children learn while having fun. The WASH in Schools flashcards include 'spot the difference' sets that can be used to focus discussion on a particular issue.

Playing educational board games, like the WASH in Schools game 'Snakes and Ladders', reinforces healthy practices such as hand washing with soap.

Children can make their own versions on pieces of cardboard or wood, inserting their own WASH messages.



'Spot the difference' cards



WASH in Schools Game – 'Snakes and Ladders'

WASH maps – Help children make a large map of the school grounds with pencils or pens on paper, or draw in the earth with sticks and stones. Conduct a walk around the school area and mark the map with all the places where water, sanitation and hygiene facilities are found. Talk about each place and identify what the problems might be. Discuss and agree on what could be done to make improvements. When the school map is finished, students can make a community WASH map and share it with their neighbours. **Simple message poster** – Posters are ideal for sharing simple information or reminding schoolchildren and adults about good hygiene. Involve students in making WASH information posters for their school or community.



#### **Making Visual Aids**



Visual aids can be made with low-cost materials – pencils, pens, paint and paper – that are usually available in local communities. You can also use a computer if one is available. The WASH in Schools in emergencies flashcards, for example, began with blackand-white drawings that were scanned into a computer, then colour was added in Photoshop. To become good at drawing, there are two things you need to do regularly: Carefully observe people and objects that you see in your everyday life. And practise drawing as often as possible. Try to draw real people and things; it may be helpful to carry a sketchbook with you wherever you go. Local artists may also be able to help you learn how to draw and work with you on developing visual aids.

#### **Basic drawing skills**

**Head-to-body proportions** – The relative size of the head in relation to the body changes as a person grows up. A baby's head is about one-third of her or his total body size, while a fully grown adult's head is only one-seventh.





**Feet and hands** – Beginners often draw hands and feet too small. Notice that the hand can cover the face and that the foot is about as long as the head.

**Stick figures** – When learning how to draw pictures of people, it can be useful to start with stick figures that show the main body parts. You can then make the simple lines into 'tubes' and finish by adding details so that your person looks realistic.



**Gender** – Notice the different body shapes of males and females. Women are typically wider at the hips than at the shoulders; a man is usually wider at the shoulders.







**Portraits** – When drawing a face, always look carefully and try to find the relative proportions and positions of different features. It is helpful to keep in mind some of the basic proportions: The eyebrows are at the same level as the top of the ears; the bottom of the nose is at the same level as the bottom of the ears; and the gap between the eyes is the same width as one eye.

Also note that the relative position of the eyes changes with age. A baby's eyes are about one-third of the way up the head, whereas an adult's eyes are about twothirds of the way up. These are important measurements that can help you draw portraits of the different age groups.





**Body language and facial expressions** – Notice how a person's body language can indicate her or his moods. A sad person's chin may drop down to the chest. When someone is happy, the chin will rise above the shoulders. The shape of the mouth and the position of the eyebrows also indicate a person's emotions.

#### Visual literacy and guidelines for design

When you are creating visual aids, it is essential to consider the visual literacy of your audience. If they are not familiar with looking at images, artistic conventions can be hard to understand – and your picture will not communicate effectively.





The picture at left uses the convention of perspective, trying to show the illusion of depth on a flat surface. The elephant, one of the largest of all animals, is small to indicate that it is farther away from the hunter and the antelope. The hunter, however, might look as if he is throwing his spear at the elephant, not the antelope. To avoid confusion, remove irrelevant details from the background of your drawing.

Stylized drawings, such as the example at left, may not be well understood. Use a simpler, realistic style rather than one that is overly artistic. Objects and figures should stand out clearly, and colour can help clarify and separate the different elements of the picture.



Reading pictures in a sequence may also be unfamiliar or not follow your intentions. In this drawing about 'the wonder pill', people who read from right to left will see that the pill makes a happy person feel ill.



Non-literate people generally read pictures in a very literal way. People and objects are best shown in the same relative sizes as in reality. The villagers in this picture say there are no huge mosquitoes in their village, so the visual aid is not relevant to them. Use objects and figures that are locally familiar, including buildings, landscapes, dress and hairstyles. The first three drawings below show styles that are common in Nepal. Showing only part of a person's body, however, can be confusing. If just the top half is shown, a viewer might think that the legs are actually missing. Also, be sure that the meaning of symbols – such as ticks, crosses, check marks and arrows – is understood by your audience.









#### **Pretesting or field-testing**

After you have made a visual aid, you will need to pretest or field-test the image. This involves showing your picture to individuals or small groups and asking them for feedback. Do children or adults find the picture easy or difficult to understand? Their responses will tell you whether the picture needs to be modified.

Before you schedule a testing session, prepare a list of open-ended questions: What do you see in this picture? Is there anything you dislike about this picture? When you choose a place for the session, try to find one with few distractions. After your respondents are gathered, introduce yourself and explain what you are doing and why you are asking questions. It is good to tell the participants that you need their help.



From left to right: Pretesting visual aids in Zambia (top), Sri Lanka, Liberia, Laos and Nepal

Make sure everyone can see the picture clearly, then let respondents handle it themselves. Proceed by asking the openended questions you have already prepared. When participants are talking, do not interrupt them and do not encourage them to give any particular answers. Just listen carefully and write down what they say. If possible, include two people to conduct the pretest: one to ask questions and one to take notes.

Try to be objective and respect the respondents' comments. Welcome constructive criticism of the picture and do not reject interpretations that do not correspond with your own. As the interview finishes, explain fully what you intended the picture to show and thank the respondents for spending time on your project. If you can accomplish 20 interviews with individuals or in small groups, you will get a good idea of how well your picture is understood. If you cannot conduct so many interviews, even a small amount of feedback is very useful for creating effective visual aids.

Teachers, designers and planners can learn a lot from the pretesting experience. Keep an open mind and do not resist the idea that you may need to change the picture. The field-testing results will guide you in revising the design. This often involves changing only a few parts of the picture. But if it was poorly understood, you might want to prepare a completely new design. Pretesting the modified/new design will help you make sure that it is easy to understand.

### Using the WASH in Schools in Emergencies Flashcards



The WASH in Schools in emergencies flashcards collection offers more than 100 coloured illustrations of water, sanitation and hygiene issues in schools and nearby communities. These pictures cover six themes – hand washing with soap, safe excreta disposal, safe drinking water, personal hygiene for boys and girls, looking after our school and WASH beyond school. They are designed to be used with *Water, Sanitation and Hygiene* 

### for Schoolchildren in Emergencies: A Guidebook for Teachers.

The guidebook provides 26 different ideas for activities and games that children can carry out to learn about healthy WASH behaviours. The flashcards can be used for lessons on the WASH in Schools themes or integrated into other subjects such as math, language and science. These pictures can also be used to develop new visual aids. When they are organized into sets, the flashcards become sorting cards, story cards, cause-and-solution illustrations or before-and-after pictures.

Teachers are encouraged to use the flashcards as often as they can and to try to invent new ways of using them. When not in use, some flashcards can be displayed as reminders of good WASH behaviours.



**Example activity.** Use the flashcard pictures to help children understand the sequence of events that can lead to diarrhoea. 'Preventing the spread of diarrhoea' is an example activity from the *Guidebook for Teachers* (page 37). Six flashcards illustrate how one child defecating by a drinking-water source spread diarrhoea to two other children.

To carry out this activity with a small group, give these cards to participants in the wrong order. Ask the children to put the cards in the right order. Let the group talk together about what they are doing and encourage them to reach a consensus – the order they agree on. Next, ask them to tell you the story using the sequence of pictures. Clarify anything that is not correct. And, finally, ask them to tell you how they can improve the situation shown in the cards.



#### Adapting the WASH in Schools flashcards for the local context

Children and adults take more notice of visual aids that look familiar and relate to their local community.

You may want to adapt the WASH in Schools flashcards so they are more relevant to your local situation. Use familiar styles for clothes and hair, and make sure animals, vegetation, landscapes and buildings are the type found in the local environment.

If available, a computer with an image editor can be very useful. It might also be possible to involve local artists to help modify the pictures.



Africa

The flashcards above show people wearing clothes in local styles; in the second row, the backgrounds show local crops. The three pictures in the bottom row illustrate another way to adapt one of the flashcards. The first drawing is the original, for use in Latin America; notice the style of the school building, the tree and the animals in the foreground. The picture in the centre is a modified version for use in Afghanistan and Pakistan; the school building, tree and animals are locally relevant. On the right, the girls have been drawn in the forefront and are now the focus of the picture.

18

#### Effective visual aids are locally relevant



Latin America





Asia



Other ideas for adapting the WASH in Schools flashcards include:

**Combine elements** – You can use one figure from two different pictures to make a new image that tells a different story, as shown below.



**Enlarge the picture** – Use a light pencil and a ruler or straight edge to draw a grid over the original flashcard. Draw the same grid with bigger squares on a larger sheet of paper or cardboard. Then follow the grid to help you draw the picture on top of the grid. Display the large image in the classroom to remind students about good WASH in Schools practices.

**Make signs** – Add words to a flashcard picture to make signs that can be displayed in or near latrines to remind everyone about the key WASH in Schools messages.

**Paint murals** – Students can organize a mural painting based on one of the WASH in Schools flashcards, with the help of a teacher or local artist. Murals can be painted on inside or outside walls to remind the school community about important WASH in Schools themes. They can also bring visual stimulation to the school environment and brighten up the schoolyard.





#### References

Edwards, Betty, *Drawing on the Right Side of the Brain: A course in enhancing creativity and artistic confidence*, Tarcher, 1979.

Ferron, Suzanne, Joy Morgan and Marion O'Reilly, *Hygiene Promotion: A practical manual for relief and development*, 2nd edition, Practical Action Publishing, Schumacher Centre for Technology and Development, Bourton on Dunsmore, UK, October 2007.

Health Images, 'Graphics for Critical Awareness', www.healthimages.co.uk.

Linney, Bob, *Pictures, People and Power: People-centred visual aids for development*, Macmillan Education, Oxford, UK, July 1995.

McBean, George, 'Rethinking Visual Literacy: Helping pre-literates learn', UNICEF Nepal, Kathmandu, January 1989.

Röhr-Rouendaal, Petra, *Where There Is No Artist: Development drawings and how to use them*, Practical Action Publishing, Schumacher Centre for Technology and Development, Bourton on Dunsmore, UK, September 2007.

United Nations Children's Fund, 'WASH in Schools', www.unicef.org/wash/schools; and 'Water, Sanitation and Hygiene for Schoolchildren in Emergencies: A Guidebook for Teachers', UNICEF, New York, November 2011.

#### **Endnotes**

- 1 United Nations Children's Fund, 'Water, Sanitation and Hygiene for Schoolchildren in Emergencies: A Guidebook for Teachers', UNICEF, New York, November 2011; open PDF at www.unicef.org/wash/schools/files/WASH\_in\_Schools\_in\_Emergencies\_Guidebook\_for\_teachers\_.pdf.
- **2** Bob Linney, personal communication; and Linney, Bob, 'Pictures, People and Power', *Learning for Health*, Issue 4, August 1993–January 1994, pp. 3–7.

# WASH

# Visual Aids for Emergencies and Development

The WASH in Schools in emergencies flashcards complement *Water, Sanitation and Hygiene for Schoolchildren in Emergencies: A Guidebook for Teachers* and come in three versions: Africa, Asia and Latin America.

This booklet provides tips for using the flashcards and adapting them to your local context to deliver life-saving messages on water, sanitation and hygiene – and to promote learning, discussion and action.







