

Teaching Resources: Be Prepared!

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The *Journal of Community Eye Health*, with its theme-orientated approach, attempts to inform readers of current relevant educational materials in each issue. Learning and teaching resources are sought extensively but are they always appropriate and used effectively?

This article completes the series on Teaching Eye Health and will overview:

The criteria for selecting materials, advice on accessing teaching resources and suggest strategies for continuing education.

Selection Criteria

• Context and Relevance

Choosing material because someone has recommended it as 'a really good resource' does not ensure it will be effective.

It is important to consider:

• *WHO* the users will be

Are they health workers, professionals, Ministry of Health officials, schoolteachers, or patients? Are the materials needed for eye care education for those working at primary, secondary or tertiary level?

• *WHERE* the materials will be used

Will it be in a lecture hall, classroom, community room?

• *WHAT* facilities will be available

Will there be suitable seating arrangements, a projector, flipcharts, computer, videotape player, good lighting, blackout blinds?

• *HOW* the materials will be used

Will the teaching method used be didactic, interactive, group work, project assignments?

• Format

Many formats are now available. Photographs, slides, overhead transparencies and videotapes are useful visual aids to complement didactic teaching or written text. The subject may, however, be more conducive to real situation teaching, conveying the experience of the teacher by means

of demonstration, practice, and supervision in the clinical area. Posters are very popular for teaching purposes but care must be taken to display them in appropriate places – stairways can prove unsafe and nervous patients will not appreciate clinical or pathology pictures in a waiting area!

Where teaching materials are for use with ophthalmic patients, e.g., patient information leaflets for health education and promotion, it is vital to ensure these are available in accessible formats, e.g., large print. Audiotapes are particularly appropriate for reinforcing verbal information given to ophthalmic patients.

There are many advantages and disadvantages to consider when choosing formats - see Table 1.¹

• Cost

Cost may be an important constraint. In an attempt to be helpful and meet the needs of users, suppliers will sometimes offer surplus, out of date materials, free of charge. Such availability is often sought. This must be a guarded practice – free materials are not always appropriate to the actual requirements. Many commercially produced teaching materials, e.g., posters, booklets and videos, are now available from pharmaceutical and equipment companies. Offered free of charge, they attract users with limited financial resources. The content will often, understandably, reflect the sophisticated materials they produce and may even carry advertisements which may result in inappropriate messages in certain situations. It is for this very reason that the *Journal of Community Eye Health* avoids indiscriminate advertising.

• Accuracy

Teaching materials, if they are to achieve their aims, must be up-to-date, applicable

and cover the required scope of the subject. Health practice is ever changing and this is reflected in the rate at which medical textbooks appear in new editions.

• Language and Culture

Teaching resources, first and foremost, need to be understood. Availability in the local language makes any learning resource more attractive and valuable and increases its demand. Sadly, most materials are available in English only. Where English is not the user's first language but is the language used or encouraged in the workplace or educational institution, it is important to ensure that materials are produced in plain English. Applying a 'Gobbledygook Test' – see Box 1 – will help decide if the text contains plain English before purchasing in bulk, e.g., books for a whole class.¹

Teaching material content should avoid stereotyping of target groups but at the same time needs to be culturally appropriate and reflect local practice, conditions, available health services and the values and concerns of users.

Accessing Teaching Resources

• Ordering from a supplier

It should not be assumed, when placing an order, that the supplier will know exactly what material is needed! It is wise first to ask a supplier to provide a publications list on which can be indicated the title and quantity required. Ideally, when placing an order without the facility of a printed order form, the following details will help the supplier to provide the correct publication:

- Full title of publication
- Author(s) name(s)
- Edition

Box 1: Gobbledygook Test

- Count a 100 word sample
- Count the number of complete sentences in the sample
- Count the total number of words in the complete sentences
- Divide the number of words by the number of sentences. This gives the average sentence length
- Count the number of words with three or more syllables in the 100 words. This gives the percentage of long words in the sample. Numbers and symbols are counted as short words; hyphenated words are counted as two words; a syllable, for the purposes of the test, is a vowel sound. So, 'advised' is two syllables and 'applying' is three
- Add the average sentence length to the percentage of long words to give the test score: the higher the score, the lower the 'readability'

It is usual to do this three times to three different samples, one from the beginning of the text, one from the middle and one from near the end. These scores can then be added and divided by three to give the average score

This test is based on R.Gunning's FOG (Frequency of Gobbledygook) formula and was adapted by the Plain English Campaign.

Table 1: Learning Resources – Uses, Advantages & Disadvantages

FORMAT	USES AND ADVANTAGES	DISADVANTAGES
Video	Shows real situations. Demonstrates skills, attitudes and behaviour (good and bad!). Can be stopped to allow discussion. Self-teaching.	Screen must be large enough for the size of audience. Equipment may be expensive or unreliable and should be transportable. May need room blackout.
Slides	Can convey complex information e.g., bar graphs, pathology. Uses large screen – good for lecture halls. Easily transportable. Teacher can be selective and flexible in choice of image and message. Often supplied with supporting text.	Equipment not so easily transportable as the slides. May need room blackout.
Overhead transparencies	Cheap and easy to produce. Overlays can build up information. Flexible – useful for any size of audience. Equipment available in transportable size and reasonably priced.	Spare bulbs should always be available. Teacher can obstruct view. Written information must be large enough to be read by all the audience. May need room blackout.
CD ROM	Interactive. Sophisticated and complex text. Easily transportable.	Expensive. Requires expensive equipment.
Internet	Up to date information. Free availability of many materials – can be downloaded.	Prohibitively expensive equipment and connection charges in some countries. Potential for information overload. Skills needed to access only appropriate material.
Textbook	Familiar and trusted reference tool. May reflect specific course content. Durable.	Individual user only. Expensive to buy and deliver in bulk.
Booklets Leaflets Handouts	Home-made versions can be produced cheaply. A good handout will reinforce important points of a topic.	Teacher sometimes tempted to photocopy full articles to act as a handout, which are not applicable. Commercially produced items can be expensive and contain advertisements. Usually produced in bulk – can be wasteful.
Posters Charts Displays	Raise awareness. Conveys information on other sources – contact details, etc. Home-made versions can be produced cheaply.	Can be difficult to transport. Needs lamination. Written information must be large enough to be seen at a distance. Need to be changed frequently. Commercially produced version may contain advertisements.

- ISBN (international standard book number).
- Price
- Publisher
- Date and place of publication.

It is important the purchaser and supplier agree the amount and method of payment beforehand. Full name and address must be included in the purchase order. Ordering via the Internet will require advance payment by credit card. Some suppliers only deliver to a physical address, not a post office box.

A *Directory of Teaching and Information Resources for Blindness Prevention and Rehabilitation* is available from the International Resource Centre, ICEH. This publication lists some 20 organisations which supply teaching materials on many topics, at varying levels and in selected formats and languages.²

Basic Guidelines for Producing Teaching Materials

Many excellent teaching materials are ‘home-made’, unpublished and unavailable through a supplier. Remember - this does *not* make them inferior! Indeed, materials produced specifically for local use are often

more effective. When producing materials, whatever the situation, the following guidelines are recommended:¹

- Consider the educational background of your users
- Test materials on a sample of users and modify the material accordingly. It is unwise to assume that users will find your initial efforts helpful
- Use plain English or local language(s) in the active tense
- Keep the message brief, to the point and avoid irrelevant material
- Emphasise key messages using bold, appropriate size and style fonts and colour
- Use pictures when the message can be conveyed in this way but make sure this approach is field tested to check for misunderstandings
- Apply the Gobbledygook Test to your own materials too! (see Box 1)
- Use words that reflect the reality of the situation – e.g., don’t use the word ‘ophthalmologist’ if none work on the project. Inclusive language will help to avoid offence and feelings of inadequacy.

You will need to consider who will write the draft, who will edit it, where you can

field test it, what it will cost to produce and if it will involve desk top publishing, a designer, illustrator, translator and printer? This will apply to whatever format you aim to provide.

Strategies for Continuing Education

Resource Centres

Core teaching materials must be accessible to learners. Increasing health information is potentially the most cost-effective measure for improving health care in developing countries.³ Any project or teaching centre can set up a ‘resource centre’. The International Resource Centre at the International Centre for Eye Health in London started life as a shelf in the Journal editor’s office! It is advisable to keep learning materials in a central point with someone responsible for their cataloguing, allocation and safekeeping.⁴

In September 2000, the International Resource Centre, London, with the support of Sight Savers International and Christian Blind Mission International, launched a new project providing Regional Resource Centres for Africa, Asia and Latin America. Eighteen months on, five new centres have now been established in India,

Pakistan, South Africa, Colombia and Tanzania. These now aim to help meet the educational and information needs within their regions (see Box 2).

Human Resources

The Oxford English Dictionary defines the word 'resource' as "the means of supplying a want or a need".

Information technology, the newest development contributing to health communication, can now link health workers and makes available to them a wide range of resources. Most sites are 'read only' but some are interactive with some health libraries providing 'touch screen' facilities. But our best means of meeting learning needs undoubtedly remains the *human* resource.

Participants on training courses can be supported following a local, national or international course by means of peer networking and the organisation of 'alumni' meetings. Delegate lists at conferences are a useful way of facilitating follow-up and for providing relevant resource information. The sharing of information with like-minded colleagues, even at a distance, is made easier through the ever-increasing use of electronic newsletters.

As individuals, we all can contribute, in

Box 2: Regional Resource Centre Contact Details	
<p>Hope Mlotshwa Email: hope@sancb.org.za Motswedi Information Centre SABPB/SANCB, PO Box 11149 Hatfield, Pretoria 0011 South Africa</p>	<p>Clarena Vasquez Cantillo Email: colaris@foscal.com.co COLARIS Fundacion Oftalmologica de Santander Apartado Aereo 3128, Urbanizacion el Bosque Autopista a Floridablanca, Bucaramanga Colombia</p>
<p>Dr Aliya Qadir Khan Email: rlr@pes.comsats.net.pk Regional Learning Resource Centre Pakistan Institute of Community Ophthalmology P O Box 125, Peshawar Pakistan</p>	<p>Sameera Khundmiri Email: icareresourcecentre@yahoo.com International Centre for the Advancement of Rural Eye Care LVPEI, Post Bag No. 1 Kismatpur BO, Rajendranagar PO Hyderabad - 500 030, Andhra Pradesh India</p>
	<p>Saraweki Mbelwa Email: riso@kcmc.ac.tz Ophthalmic Resource Centre for East Africa Kilimanjaro Centre for Community Ophthalmology KCMC P O Box 3010, Moshi Tanzania</p>

some measure, to learning and information by sharing our own knowledge and experiences, however limited, with those who seek to make Vision 2020: the Right to Sight, a reality.

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Exam	Dates of Examination	Location	Closing Date
Part 1 MRCOphth	8–9 April	India	22 February
	22–23 April	UK	11 March
	7–8 October	UK, India	26 August
Part 2 MRCOphth	9–11 April	India	22 February
	17–21 June	UK	6 May
	9–10 October	India	26 August
	4–8 November	UK	23 September
Part 3 MRCOphth	4–8 March	UK	21 January
	11–12 April	India	22 February
	9–13 September	UK	29 July
	10–11 October	India	26 August
DRCOphth	27–28 June	UK	16 May
	18–19 November	UK	7 October

Overseas Location:

- Aravind Eye Hospital, Madurai, Tamil Nadu, India