

**NEPAL**

**Basic and Primary Education Programme II  
Establishment of a Professional Publishing Capacity for BPEP II**

**Seminar 4  
Book Design and Illustration**

**29 November – 11 December 1998**

**Trygve Hansen**

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### **Annexes**

Annex 1 Terms of Reference

Annex 2 Draft House Style Manual

Annex 3 Draft Guidelines for Illustrations

The seminar on book design and illustration was the fourth in a series supporting the building of professional publishing within the Basic and Primary Education Programme Phase II (BPEP II). Terms of reference are provided in Annex 1.

The design and illustration specialist visited Nepal from 29 November to 11 December 1998.

**Abbreviations**

BPEP II	Basic and Primary Education Project, Second Phase
CDC	Curriculum Development Centre
CRC	Camera Ready Copy
DTP	Desk Top Publishing
IBD	International Book Development Ltd
MOE	Ministry of Education
PPC	Primary Publishing Cell

The seminar took place in the offices of the design department of the PPC in Sano Thimi in the period 29 November – 11 December 1998.

Participants were: Mr Navindra Man Rajbhandari (Design Manager PPC)  
Ms Chhayan Maskey (Typesetter PPC)  
Ms Nanda Sitaula (Typesetter PPC)

The seminar was conducted as a series of short workshops concentrating on the following themes:

- basic concepts for graphic design and illustration (understanding the design tools)
- hands-on typographic exercises (experiencing how the tools work)
- critical review of current production of textbooks and other materials

The main aim of the workshop, the hands-on training and the critical review was to provide background and knowledge about how to produce communicative, functional and attractive materials, with a view to developing further and refining textbook and educational materials design at PPC.

The workshop and hands-on training dealt with:

- typographic communication
- typefaces (Nepali and Latin) and typesizes
- letter-space, word-space, line-space (leading)
- arrangement of type (columns – justified, unjustified, centred text)
- book cover, title page
- headlines
- the purpose of textbook illustration
- appropriate illustration techniques, consistency of style
- positioning of illustrations, integration of text and illustration
- awareness of page composition
- importance of paper, print, binding and cover quality

The critical review of the current production at PPC was conducted on an on-going basis and included a representative selection of primary textbooks, teacher guidelines and supplementary materials. At the end of the seminar a revision of the typographic section of the existing House Style Manual was drafted and a draft guideline for textbook illustration produced.

### **3 FINDINGS AND OBSERVATIONS**

#### **3.1 The staff at the PPC Design Unit**

The Design Unit at the PPC presently employs a staff of three: Mr Navindra Man Rajbhandari (Design Manager) and two assistants, Ms Chhayana Maskey (Typesetter) and Ms Nanda Sitaula (Typesetter).

Mr Navindra is an extremely capable, industrious, committed and technically competent graphic designer. He is responsible for the generally very good overall quality of presentation of the whole range of educational materials produced at PPC/CDC.

Ms Chhayana Maskey and Ms Nanda Sitaula have no actual graphic background. However, instructed and guided by the Design Manager, they typeset manuscripts and layout materials using the PageMaker program or in Word. Their working knowledge and level of skills in the programme are good and they mostly work quickly and with confidence.

Ms Chhayana Maskey and Ms Nanda Sitaula are motivated, very receptive, quick to understand and keen to learn and develop their skills. During the seminar they showed clear development in understanding basic graphic concepts and in applying them practically.

The current staff development plan within PPC requires them gradually to begin to take over more design responsibility. Both expressed the need for further training in the use of software and in graphic design.

#### **3.2 Educational materials produced by the PPC**

The overall typographical standard of textbooks (Grade 1-5), teacher's guides and other materials, is generally good. The chosen typefaces (Himali for Nepali script and Helvetica for English) are appropriate and the textbooks are well illustrated.

Illustrations are usually produced by outside freelance illustrators mostly as line drawings used as same size illustrations and they normally display an appealing consistency of style.

Camera ready copy (CRC) is produced by Mr Navindra by pasting illustrations straight onto pages with text print-outs that are produced by his assistant using the PageMaker or Word programs.

##### **3.2.1 Critical review of the production**

An on-going critical review of a representative selection of the current educational materials production at PPC was conducted in close collaboration with the staff of the Design Unit with a view to develop further and refine the materials design.

The following areas were identified as needing attention:

- page composition
- placement of illustrations
- integration of text and illustration

- awareness of scale in illustrations
- use of justified/unjustified text
- consistency in headings
- paragraph indication
- lack of variety of Nepali fonts for headings
- lack of proper typeface families in Latin script

It was also noticeable that the relative small format for textbooks and teacher's guides causes pages to have a tendency to appear over-crowded with information. This impression is compounded by the fact that the printer (JEMC)'s tasks – printing, folding, binding and trimming – are often rather carelessly done. The margins of the pages are much narrower (or bigger) than planned on the CRC, page spreads do not align, and it is often difficult to read the text near the inner margin (gutter) because the binding is done by side stapling.

### 3.3 **Printing and binding**

Textbooks and teacher's guides are printed at Janak Educational Materials Centre. Other materials are printed by various private printing firms. The printing technique is offset mostly using one colour (two colours for covers), but some supplementary materials are produced in two or four colours.

Despite the fact that the textbooks and teacher's guides are generally well designed their appearance and quality are often compromised by the production at Janak Educational Materials Centre. Most of the books suffer from one or more of the following problems:

- thin and rather poor quality printing paper
- poor printing quality (uneven inking, print showing through pages)
- inaccurate alignment of print on printing sheets
- inaccurate folding of printing sheets
- too narrow gutter (book binding by stapling through the side of the book)
- far too thin quality bookcover material, glued to the book inadequately

The poor quality of printing paper, binding and book covers not only result in the textbooks barely lasting one school year before they fall apart but also seriously affect the overall appearance and attractiveness of the textbooks and mask the care and skill that have gone into the design and illustration.

The materials that are printed using other printing firms do not, in general, suffer as much from the above problems. The printing and cover papers are of better quality and more care is taken in their production.

#### 4. **RECOMMENDATIONS**

##### 4.1 **Staff development**

It is recommended that:

1. Ms Chhayan Maskey and Ms Nanda Sitaula be provided with further training in the use of software, this training to take place in connection with the installation of the new DTP equipment.
2. Ms Chhayan Maskey and Ms Nanda Sitaula be provided with further design training (in line with the current staff development plan proposed within PPC that they should begin to take over more design responsibility).
3. The Design Manager, Mr Navindra, receive a 1-2 month placement in two or more major educational publishing houses in either Singapore or the UK.

##### 4.2 **Product development**

It is recommended that:

1. Himali font be used for mainstream work.
2. New Nepali fonts be purchased for greater variety of effects (for headlines, book covers, title pages, posters).
3. Proper textbook typeface families in Latin script from Adobe be purchased.  
Recommended fonts include:
  - Times, Serifa (serif typefaces)
  - Frutiger, Univers, Helvetica, Gill Sans, Futura (san serif typefaces).The fonts should be installed with the new DTP equipment
4. The Design Unit at PPC be supplied with practical training/reference manuals for the DTP programmes.
5. The local DTP environment be investigated before taking a decision about which DTP program should be selected (PageMaker, QuarkExpress or other).
6. A larger format for primary textbooks should be used to allow greater flexibility for design and illustration and to make the pages appear less crowded.

##### 4.3 **Printing and binding**

It is recommended that:

1. The quality of printing paper for textbooks, teacher guides and other materials printed at Janak Educational Materials Centre be improved.
2. Book binding be improved (by stitching rather than side stabling).
3. Stronger covers be used on the books.

**TERMS OF REFERENCE**

1. Prepare a training programme for Nepal suitable for primary education materials design as described below under "Seminar 4". The emphasis should be on practical work and activities for the participants.
2. Visit Nepal on the dates agreed to deliver the training seminar.
3. Prepare a one page wrap-up paper for a wrap-up meeting with Mr Dhungel and submit a consultant report to IBD which gives the context, training activities, assessment of the participants and any particular needs which they have for further training, problems or special points to note and any recommendations (e.g. on design software needed).

**Seminar 4**

**Book Design and Illustration**

1. Critical review of existing publications
2. Basic concepts for graphic design and illustration
3. Integration of methodology, layout, illustration and typography
4. Typographic communication
5. Purposes of publication illustration
6. Illustration techniques and consistency of style
7. Page composition
8. Collaboration with printing requirements and effect of paper on quality of design
9. Review of house style manual – draft guidelines for textbook illustration

Methodology: workshop with emphasis on discussion, practical work, hand-outs, examples (good and bad) and trainee participation.

**DRAFT HOUSE STYLE MANUAL**

## DRAFT GUIDELINES FOR TEXTBOOK ILLUSTRATION

Illustrations should always be an integral part of the textbook design and they should be given the same attention as the text. If illustrations are particularly important for a subject they will often be an important determining factor when deciding the format (size) of the book.

### 1. The purpose of illustration

Illustrations in textbooks have two main purposes:

1. To motivate the reader
2. To help the reader to understand, to remember or to solve problems

Illustrations can be used:

**to describe** – to show what something looks like

**to explain** – to clarify understanding

**to quantify** – to show numbers and quantities (graphs, charts)

**to show development** – to demonstrate stages in a process

**to simplify** – to assist in mastery of concepts

**to amuse** – to bring the "play" element in learning

**to decorate** – to enhance overall attractiveness

The primary function of an illustration in a textbook is to support and explain the text.

An illustration, as the word implies, illuminates the text and it must be directly related to the concepts, ideas and language skills to be developed.

The quality of an illustration is to be judged by the degree to which it enables the student to understand the text.

### 2. Key points about illustrations in textbooks

The following paragraphs list a number of important points that should be kept in mind when producing and applying illustrations to textbooks:

#### **What is the purpose of the illustration?**

Make sure that the illustrator knows exactly what message the illustration should convey (let the illustrator read the text and discuss with the editor and the designer). Look critically at the finished illustration and try to do it with the eyes of the intended reader. Does the illustration actually convey the intended message? Is the illustration easy to understand?

#### **Testing illustrations**

It is very useful to ask several members from the target groups (who don't know the intention of the illustration) how they understand it. If the illustration seems to cause problems it should be changed and tested again.

**Consistency of style**

Encourage the illustrator to apply a consistency of style to illustrations (even line thickness, consistent drawing and shading technique). Ask for the illustration to be kept as simple and clear as possible.

**Size of illustrations**

Make sure that the illustrator is supplied with accurate information about the size of the space allocated for each illustration.

**Placement of illustrations**

Always remember to position the illustration near to the text it refers to so the connection is obvious. It is, however, important to leave a reasonable margin of space around the illustration so that the text and illustration do not disturb and interfere with each other. When you position illustrations try to integrate text and illustration in a harmonic and logical way. Remember to look not only at the illustration's relation to the text but also at the relation to the whole page as well as in relation to the opposite page (you always see two opposing pages in a book). Try to look at the whole page as if it was a picture and see if the text and illustrations create a harmonious whole.

**Captions for illustrations**

If the message is difficult to convey it can be explained in a caption to the illustration. Always position the caption so that it relates directly to the illustration and be consistent in the positioning (for example under the illustration aligned left). Make the caption look different from the main text (use small size type or italics).

**Emphasising key elements**

Important features in an illustration can be emphasised by drawing a circle around key areas or using arrows.

**Awareness about scale/size**

If the illustration contains several elements or if several illustrations are positioned on the same page you should be aware that a reasonable scale between the different elements should be maintained (for example: a cow is bigger than a chicken – Pakistan is bigger than Sri Lanka).

**Vertical and horizontal lines**

Be very aware that vertical and horizontal lines in the illustration should be vertical and horizontal when the illustration is positioned on the page.

**Scanning of illustrations**

To obtain the best quality of scanned images it is recommended:

- To scan at the same resolution as the printer (i.e. 300 dpi if using a 300 dpi laser printer)
- To scan the image to the size it is to be used
- To try to avoid too much enlargement or reduction (this will affect the line thickness)

**Distortion of scanned images**

Be very careful not to distort the image if and when you change the size after the illustration has been imported into the DTP program. Sizing should always be done proportionally (press the shift key when you change the size).

**Use of photographs**

You should always use good quality original photographs. Avoid scanning photographs from printed textbooks as the resulting quality will almost always be poor. A good line drawing traced from a photograph is better and more instructive than a poor quality photographic image.

Photographs often contain much more information than needed to convey the message you want to convey. Always remember to crop photographs so that they show only what you want to show.

Be aware of horizontal and vertical lines (for example the horizon in the picture, lamp posts, trees) when you position a photograph on a page. Horizontal and vertical lines are often not horizontal and vertical in the photographic image because the photographer did not hold the camera level when the picture was taken. If you need to align the image you should remember to crop all four sides of the picture after the alignment so that the edges of the picture also align.