# Chapter 4.8

### TEXTBOOKS, EDUCATIONAL MATERIALS AND TEACHING AIDS

### MAIN OBJECTIVES

- To provide quality materials to all teachers and learners that respond to relevant immediate, short-term, and long-term teaching and learning needs and, where possible, respect cultural specificities.
- To ensure the development and maintenance of functional literacy.

# CONTEXT AND CHALLENGES

In general, resources for educational activities are in short supply in emergency and post-conflict situations due to budgetary constraints. Usually, this shortage is further exacerbated by a breakdown in a country's productive capacity, including its publishing and printing industries and its distribution networks due to conflict or other emergency. It is therefore often difficult to ensure an adequate supply of educational materials such as textbooks, teaching aids. reading materials and student exercise books. In refugee situations, it may also be difficult to procure textbooks from the country of origin.

The supply of textbooks can play a critical role in maintaining education guality and effectiveness. They are important as reading materials and are also vital for their content. They are not the ultimate solution to a country's education system, but they are a major component underpinning many curricula and education systems. They provide a solid basis for children's learning and a means for gaining information and knowledge. While education systems should strive for properly trained teachers who do not need to rely solely on textbooks in order to conduct their classes, in situations where there is a lack of gualified, experienced teachers, textbooks provide a useful guide for teachers to follow. In addition to textbooks, supplementary reading materials are an absolute prerequisite, if schooling is to develop, maintain and enhance functional literacy. In early emergencies, the supply of blackboards and writing materials is the most urgent task, though there may also be a shortage of these supplies in prolonged crises as well.

During emergencies, affected families may be unable to purchase writing materials and other school requirements for their children. Supplies of writing materials, textbooks, etc., may be stolen during distribution in insecure regions. It may be expensive to import materials. Even if money is available to buy textbooks, maps, or other supplies from another country, they will not be culturally specific and may be inappropriate. It is expensive and time consuming to organize printing of local materials in another country, and then to import them.

Refugee families will have limited income-generating opportunities and so will not have resources to purchase learning materials for their children. Therefore, in most refugee situations all necessary teaching and learning materials must be provided by outside assistance. In refugee emergencies, the choice of curriculum dictates much of what follows. UNHCR Education: field guidelines state that, where possible, the curriculum of the country or area of origin should be followed in refugee schools (UNHCR, 2003: II, para. 2.1.1). This is to enhance the possibilities of a smooth return to the country of origin. It may be difficult to extend existing host country education programmes to refugees since there may be a language barrier between the refugee children and youth and the host country school system. If the home country curriculum is used, textbooks may not be available as refugee students and teachers will mostly have fled without them. It may be difficult to obtain home country materials for use by refugee students.

Internally displaced populations face similar challenges. In addition, government-approved textbooks may be available to IDP education programmes, although sections of the content may be contested by IDPs and therefore considered inappropriate.

There may be a conflict between immediate printing of textbooks to meet the need in the schools, and revision to remove elements that are controversial or inappropriate. (See also the *Guidebook*, *Chapter 4.1*, 'Curriculum content and review processes'.)

For its education programmes in situations of emergency, Save the Children (Nicolai, 2003: 80) recommends that education supplies should:

- Correspond to the country's culture and local practices in education while encouraging the participation and active learning of children.
- Be available for distribution quickly following an emergency event.

- Include teaching-learning materials, but also address aspects that facilitate children's attendance, e.g. clothing, hygiene items.
- Be consistently delivered during a chronic crisis.
- As much as possible be procured from local suppliers.

### SUGGESTED STRATEGIES

Some key strategies for making textbooks, educational materials and teaching aids available in emergencies and during early reconstruction are noted below.

### Summary of suggested strategies Textbooks, educational supplies and teaching aids

- 1. In early emergency, education providers should meet with teachers from refugee or IDP populations to determine which education materials they consider to be needed/appropriate.
- 2. Take steps to strengthen the capacity of education ministry departments for the production and distribution of textbooks and other educational materials.

- 3. Prepare a framework for textbook revision and renewal, according to the phase of emergency.
- 4. Conduct a review of textbooks, reading materials and teaching aids in use by education providers from civil society, external agencies and NGOs.
- 5. Assess the need for and availability of textbooks, educational supplies and teaching aids.
- 6. Develop plans for the supply of needed education materials.
- 7. Develop an equitable distribution mechanism, and provide for maintenance and replenishment of materials.

### **Guidance notes**

- 1. In early emergency, education providers should meet with teachers from refugee or IDP populations to determine which education materials they consider to be needed/appropriate.
- What textbooks and other materials do they have with them?
- What materials can they easily re-create that they do not have with them?

- Can missing materials be re-acquired or replaced?
- Which materials do students and teachers find most valuable or of greatest relevance?
- Are there educational materials that were not traditional features of the curriculum that need to be accessed?

#### RECOMMENDATIONS ON EDUCATION SUPPLIES FOR RAPID RESPONSE IN EMERGENCIES

#### How soon are supplies needed?

The aim is to create structured activities for children and adolescents in most locations within a month of displacement, and in all locations within three months. A unified education system should be in place for completion of the interrupted school year or for a new school year, not later than six months after the first major displacement.

#### When should supplies be procured locally?

Where possible, it is preferable to procure education supplies in the country or immediate region concerned. In many cases this is feasible, especially where procurement is through organizations such as NGOs. Supplies obtained in this way may be cheaper (especially if transport costs are taken into account), logistics may be easier, and there will be a benefit to the local economy.

#### When should supplies be procured internationally?

Where necessary, supplies can be sent from the UNICEF warehouse in Copenhagen or from United Nations or NGO regional centres, such as the UNESCO Programme of Education for Emergencies and Reconstruction (PEER), Nairobi. UNICEF often sends emergency supplies from Copenhagen, since procurement by local UNICEF offices requires various administrative approvals, which take time. UNICEF can send emergency education and recreation kits within a week, but

with high air freight costs, and the need for major logistic support for distribution on arrival. Sea freight takes several weeks but is less costly. Sending kits is appropriate when speedy local procurement by efficient NGOs is not practicable, and especially when procurement would otherwise be through a national government that lacks the capacity to work fast and cannot prevent diversion of resources.

Source: (INEE, 2001)

2. Prepare a framework for textbook revision and renewal, according to the phase of emergency.

(See also the *Guidebook*, *Chapter 4.1*, 'Curriculum content and review processes'.)

- During the emergency, maintain the production of textbooks as a priority. Seek external assistance if necessary.
- At the early reconstruction phase, prepare a national plan of action, including needs assessment, staff training, procurement of necessary equipment, textbook revision workshops, and funding for the preparation of a new generation of textbooks.
- Consider building a partnership with an institution of international repute to facilitate the use of updated content and methods.
- Ensure that writers are trained in the principles of gender equity, peace and conflict resolution, human rights and humanitarian norms, and active citizenship so that these are reflected in the textbooks.

3. Conduct a review of textbooks, reading materials and teaching aids in use by education providers from civil society, external agencies and NGOs.

(See also the *Guidebook, Chapter 4.1*, 'Curriculum content and review processes'.)

These materials may be used for refugees in the country, IDPs or non-migrants, as well as any refugees from the country attending refugee schools in their countries of asylum.

- How can these materials be used as resources during the textbook renewal process in the reconstruction phase?
- How can the use and production of these materials be harmonized, even during the emergency?

### 4. Assess the need for and availability of textbooks, educational supplies and teaching aids.

- Which textbooks, supplies and educational aids were in use prior to and during the emergency?
- Are textbooks and other educational materials still available?
  - If so, how many, for each grade level and school subject?
  - For refugees, is at least a single complete set of textbooks from the country of origin available? If not, take steps to obtain one as soon as possible.
- What is the standard for distribution of textbooks?
  - A standard such as a student:textbook ratio of 3:1, or "subject specific textbooks should be distributed to every child" or "subject textbooks should be available in 'class sets' of 40 or 50 that can be used by several different classes in the same grade" must be developed in order to establish clear plans for achieving it (Sinclair,

2002: 60).<sup>1</sup> Note that use of class sets often fails because school timetables require concurrent subject teaching per grade.

- Standards for primary and secondary education may be different – especially initially. For secondary education, textbooks for all subjects and for all students may be necessary to compensate for limited hours of schooling and/or under-qualified teachers (Sinclair, 2002).
- Ultimately, the standard to aim for is one book per child per subject.
- How many additional textbooks are required?
- Were the textbooks previously used by conflict-affected populations, such as refugees, acceptable to all members of the community or did certain groups contest their use?
  - If contested, consider halting the use of these materials until a thorough curriculum and textbook review can be conducted (see the *Guidebook, Chapter 4.1*, 'Curriculum content and review processes' for more information).
- What other resource materials are available? (Resource materials are necessary to supplement and complement limited textbooks and to provide a base for a more enriched curriculum.)
  - Teacher guides: As teachers may have difficulty in using textbooks and teaching aids in an interactive way, there is generally a need for specific teacher training on the use of and practice with teacher guides. Teacher guides should not be distributed until the training takes place (which should be a very high priority). (See also the *Guidebook*, *Chapter 3.4*, 'Teacher training: teaching and learning methods'.)
- 1. UNHCR sets a target of two students per textbook for its programmes (UNHCR, 2003: 15, para. 2.3.10).

- Teaching aids need to be made available or developed by the teachers. To do this, consider providing the following:
  - Posters for numbers and the alphabet, demonstrationsize mathematical tools (triangles, ruler, compass), and world and regional or country maps.
  - Markers or crayons and poster board so that teachers can create their own teaching aids.
  - Books or guides to creating teaching aids.
  - Teacher resource centres (over the longer term) so teachers can prepare teaching aids and consult reference books.
  - Exercise books for students to take notes and complete exercises: UNHCR recommends that refugee students receive multiple exercise books per subject per year, with the total number of pages increasing with higher grades of schooling. Since many teachers expect students to copy notes and learn them for examinations, a good supply of exercise books is essential.
  - Reading materials for students to maintain functional literacy:
  - Consider a broad definition of reading materials (e.g. newspapers, information pamphlets especially about HIV/AIDS, sexual and gender-based violence (SGBV), peace, tolerance, etc.) in order to identify materials that already exist and are readily available.
  - Consider creating reading materials. (Interview community elders and write down traditional songs, poems, stories, etc.)
  - Develop child-written 'books' by conducting 'creative writing' classes where the children write and illustrate their own books and then share them with each other. This is also an excellent way to get children to begin reading.

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- Will the curriculum include life skills components such as HIV/AIDS, peace education or landmine awareness, etc.? (See also the relevant Guidebook topics.)
  - Review existing, trialled resources on these topics.
  - Consider using or adapting them as it would be inefficient to re-develop these materials for the existing situation.

## 5. Develop plans for the supply of needed education materials.

- Review the budget implications of producing or purchasing the required number of textbooks and other needed resource materials.
  - If sufficient funds are not available, is assistance from United Nations agencies or NGOs available?
  - Is such assistance limited to a one-time distribution or will it support school or education activities over a specified period of time?
- Evaluate the functioning and quality of any existing textbook suppliers in the country.
  - Do they have the necessary raw materials to produce the required number of textbooks?
  - Is their equipment in working order? Do they have spare parts in case of a breakdown?
  - What is the quality of their products? How long is a textbook expected to last before it needs replacement?
  - How long will it take to produce the textbooks?
  - Do suppliers have the capacity to distribute the textbooks within the country or to a specified central location?
  - If there are multiple suppliers, is there a competitive bidding process in place for use when selecting a supplier?
- If there are no functioning printing companies in the country, consider whether textbooks can be reproduced in another format temporarily, or whether the printing can be out-

sourced to a neighbouring country until local printing facilities are operating again.

- At the local level, search out low-cost reproduction techniques such as mimeograph machines and silk screening to distribute lessons or modules to teachers.
- Obtain heavy-duty photocopy machines for regional education centres.
- Consider whether textbooks can be imported from another country.
  - What is the cost of purchasing and transporting them compared to the local cost of production and transport?
  - In what language(s) is/are they available?
  - Do the majority of children understand the language(s)?
  - If materials must be translated, this work must begin immediately so the textbooks that are ultimately distributed are available in the children's language.
  - Do the textbooks follow the curriculum in use?
  - Are the textbooks locally appropriate? Certain textbooks such as those for mathematics may be appropriate across countries/cultures whereas others, such as history, would not be appropriate.
  - Are the foreign suppliers reliable?
  - How long will it take to get the textbooks to the classrooms?
- Determine what other educational materials are required, in addition to or instead of textbooks. (See also the 'Tools and resources' section for examples of materials that might be provided 'immediately, sooner, later' and for interim options related to learning materials.)
  - Are there local means of producing these materials?
  - Search out low-cost reproduction techniques such as mimeograph machines and silk-screening to distribute lessons or modules to teachers.

- Can low-cost 'hardware' be pre-positioned?
- How long will it take to procure or produce them?
- Encourage the use and development of locally made teaching aids and recreational materials.
- What can be recycled (e.g. bottle tops for use as counters in mathematics)?
- What can be constructed from natural resources?
- Are pre-packaged rapid emergency response kits available and desirable under the circumstances? (See the 'Tools and resources' section for a list of advantages and disadvantages associated with pre-packaged kits.) Consider:
  - Cost.
  - Local production of supply and material kits.
  - Whether classes vary widely in the number of students (since classroom kits have supplies for a fixed number of students).
  - Appropriateness to local standards/curriculum.
  - Cultural relevance.

### DELAYS IN TEXTBOOK PRODUCTION IN RWANDA

"Looking back one has to ask why it took nearly three years to get materials to learners. Rwanda did not move in an uninterrupted manner from the major crisis in 1994 to growing stability and peace. On the contrary, there were repeated serious disruptions of security. It took time in 1994 to ensure security and the control of the national army in the south; one million refugees returned suddenly, late in 1996 from neighbouring countries; and there were repeated incursions into northern provinces lasting until 1998. Population movement within the country never ceased as people tried to settle down and then had to move again, particularly in the north. Distractions for the Ministry were many due to continual fire fighting in the field: re-opening more schools, finding teachers and field education officers, rehabilitating yet more schools, requesting increased distribution of supplies from partners.

With regard specifically to the textbook production exercise, the Ministry of Education insisted on local printing despite the time lag involved. Agencies then needed special authorization from their international headquarters for local procurements, spare parts had to be brought in from Germany for damaged printing presses, and technical printing capacity needed to be restored. It was a time when ministries of education in Africa still clung to the principle of producing national textbooks not only within their borders, but by the Ministry itself. Since then, major changes have occurred in most countries liberalizing textbook production, including in Rwanda."

Source: Obura (2003: 90)

- 6. Develop an equitable distribution mechanism, and provide for maintenance and replenishment of materials.
- Does the distribution strategy rectify or take into consideration inequalities of access to materials in terms of:
  - Geographic location?
  - Socio-economic considerations?
  - Linguistic inclusion? (Note: materials must be translated well in advance of distribution.)
- Consider ways the community can be involved in designing and implementing a distribution system for materials as this will help make the system more transparent.
  - Through the development of an information campaign to inform families and students of the materials that will be provided to them, which will help discourage abuse during the distribution process.

- Through assistance with distribution of supplies either at the schools or through other community structures (instead of direct distribution to children by teachers or school administrators).
- Through involvement in the development and implementation of monitoring systems to ensure that textbooks and supplies are reaching the intended recipients.
- Review and strengthen (or develop) monitoring systems to account for, protect and replenish textbooks and other educational materials.
  - Are textbooks stamped and numbered to ensure that they are accounted for?
  - Are textbooks covered with plastic film or paper to protect them from damage?
  - Are damaged textbooks mended?
  - What is the policy if a textbook is damaged or lost?
  - Are mechanisms in place to ensure that textbooks are returned at the end of a school year so they can be re-used the following year?
  - Do record-keeping procedures exist to account for the distribution, use, return and replenishment of textbooks and other educational materials?
  - Care should be taken to pay attention to the depletion of supplies, especially if an emergency situation persists.
  - Criteria must be established for the continuing provision of supplies.
  - Ensure that teachers are not discouraged from using textbooks in class or issuing them to students for fear of punishment if some are lost or damaged.
- Consider ways of recording innovative practices that have been put in place at the community level to develop and select educational materials. This will promote respect

and communication between community and educational authorities.

• How can such practices be shared with other communities and between all levels of the education system?

### **TOOLS AND RESOURCES**

## 1. Excerpt from the 'immediately, sooner, later' matrix of response

PROGRAMME EXAMPLES			
IMMEDIATELY	SOONER	LATER	
STUDENT MATERIALS	1	1	
<ul> <li>Start-up set of exercise books/slates, pens/pencils and recreational materials</li> <li>Additional exercise books for adolescents</li> <li>Learning materials for life skills and recreation</li> </ul>	<ul> <li>Textbooks or similar texts based on area of origin curriculum (aim for this)</li> <li>Consumable supplies</li> <li>Supplies to promote participation, e.g. second- hand clothing, sanitary materials, food incentives</li> </ul>	<ul> <li>Replenishment of consumable supplies</li> <li>Additional items added according to local and programmatic needs</li> <li>Supplies for new programmes e.g. girls' literacy support, youth writers, sports groups</li> </ul>	
TEACHER/FACILITATOR M	ATERIALS		
<ul> <li>Exercise books, pens, textbooks, teacher's guides for preparing lessons</li> <li>Resource materials for psychosocial and life skills education</li> <li>Registration and student attendance books</li> </ul>	<ul> <li>Refugee/IDP professionals should hold writing workshops to produce emergency-related materials</li> <li>Development of guides focusing on developing the classroom skills of para- professional teachers</li> </ul>	<ul> <li>Mass reproduction and distribution of textbooks, teacher's guides, curricula and education aids</li> <li>Life skills strengthened and controversial areas resolved</li> </ul>	

Source: Nicolai and Triplehorn (2003: 31)

# 2. Options for interim decision-making on learning materials

In her case study *Never again: educational reconstruction in Rwanda*, Obura (2003: 133-134) developed the following options for interim decision-making on learning materials. They include:

#### **Emergency options:**

- Production of a simple textbook decision guide or interim learning materials guide.
- Emergency copying of vital teacher and pupil materials, in language and mathematics with a general studies guide for teachers at lower and upper primary, and lower secondary levels.

### Interim options:

- Reprinting of pre-emergency materials.
- Adaptation of pre-emergency materials, and possibly translation.
- Off-the-shelf purchase of materials from neighbouring countries.
- Translation of materials from neighbouring countries.
- Adaptation of materials from neighbouring countries.

### **Developmental options:**

• Production of new national materials, for compliance with new curricula.

# 3. Advantages and disadvantages of education kits

ADVANTAGES	DISADVANTAGES		
EDUCATIONAL			
<ul> <li>Kits accomplish their basic goal of providing the necessary materials to support educational activities during emergencies</li> <li>They enable children to engage in meaningful learning activities while administrative capacities are being restored at a national level</li> <li>As kits enable the fast recommencement of classes and other educational activities they provide a signal to the community of hope for the future</li> <li>The materials increase access to schooling and improve attendance</li> <li>Kits can facilitate teachers' sense of effectiveness and security by providing them with materials suited to working in difficult conditions with large numbers of children</li> </ul>	<ul> <li>Pre-designed kits never quite fit any given situation and local needs cannot be taken into account</li> <li>The deployment of kits may preclude dialogue amongst families, children, education officials and agencies in the field about the roles they all can play in developing a long-term community based education system</li> <li>Working with kits can make aid workers overly complacent about providing training and additional support and may create a dependency because of their convenience for users, donors and procurement managers</li> <li>Kits can never replace all the other components necessary in creating a successful education system: community mobilization, identification of an appropriate curriculum, the development of learning and teaching materials, identification and training of teachers and the monitoring of standards.</li> <li>Kits are not gender-sensitive and without additional work with recipient communities, the benefits are often unequally distributed between boys and girls along the lines of existing biases and prejudices</li> </ul>		
ECONOMIC			
<ul> <li>It may not be possible for agencies to increase their budget line for education quickly enough to purchase a large number of new materials, but if standby stocks can be used, budget issues can be handled later</li> <li>Kits are widely considered to be attractive to donors as a tangible emergency relief product</li> </ul>	<ul> <li>The failure to purchase materials in the relevant country/region disadvantages the local economy</li> <li>Kits are heavy, therefore both storage and transport costs are high</li> <li>Kits are expensive when compared with the cost of bulk materials</li> <li>Both financially and logistically the kit approach is unsustainable</li> </ul>		

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ADVANTAGES	DISADVANTAGES		
LOGISTICAL			
<ul> <li>Pre-packaged and pre-assembled kits mean field staff do not have to spend valuable time assembling materials from individual boxes</li> <li>Pre-assembled kits can prevent delays and provide the rapidity and reliability of response needed in emergency relief</li> <li>Pre-assembly of kits has the advantage of discouraging and helping to prevent theft of valuable, compact items</li> <li>Pre-assembly means that the materials are protected from the rain and from other damage during transit</li> </ul>	<ul> <li>If road conditions are poor and air access is overloaded with other relief goods, bulky boxes of educational materials will not be given priority on crowded flight/road transport schedules</li> <li>If, as is often the case, there is a chronic shortage in the supply of educational materials, agencies must spend time disassembling kits so that the contents can be distributed as fairly as possible</li> <li>If a school receives fewer kits than it requires, disassembly may also then take place at this level and the original expenses incurred in packaging are rendered increasingly inefficient</li> <li>The pre-assembly of standard kits renders 'refilling', or 'topping up' a complex task if the kit approach is used on a prolonged basis: the diverse items in the kits will need to be replenished at different rates</li> </ul>		

#### CONDITIONS IN WHICH PRE-ASSEMBLED KITS OF SCHOOL MATERIALS MAY BE ADVANTAGEOUS

- When the procurement and distribution of materials are the responsibility of an unreliable government system, or it is not possible to quickly procure the needed items from the local market (e.g. if there is no known implementing partner that could make local purchases), pre-assembled standby stocks represent the best viable option for reaching crisis affected communities as swiftly as possible
- The most effective use of kits comes when they form a component of a longer process and are used primarily to provide a critical bridge between an initial emergency and a recovery and reconstruction phase
- Kits are most beneficial when accompanied from the beginning by training for teachers on the use of the teacher guide and materials and when the supply of kits stands only as the initial step for agencies in the process of redeveloping and establishing a successful educational structure

Sources: Sinclair (2001: 57-66); Nicolai (2003: 79); Eversmann (2000); Miller and Affolter (2002: 15-25)

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