



Swedish Civil
Contingencies
Agency

Training Material Development Guide



Developing Training Material Guide

Swedish Civil Contingencies Agency (MSB)
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Layout: Advant Produktionsbyrå AB

Printing: DanagårdLiTHO

Order No. MSB507 - December 2012

ISBN 978-91-7383-303-5

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Acknowledgment

This guide is an adaptation of a more specific Training Material Development Guide that was developed for the Disaster Preparedness and Prevention Initiative Project in South Eastern Europe (DPPI-SEE). The development of the earlier and original guide owes a great deal of gratitude to a number of key individuals. I would like to acknowledge the work of the following individuals whose valuable comments and feedback were indispensable, namely Michael Meier, Maja Herstad, Marielle Pettersson, Petre Vlad, Cvetka Krajic, Katja Banovec, Igor Milic, Damir Cemerin and Trajko Todorcevski.

Preface and Purpose of the Guide

This guide is designed to document the process and good practice in developing training material, piloting and testing it. The guide is aimed to help you (the course organiser) to plan and conduct the course. The guide includes information on the main steps and stages in sequence of designing a training course all the way to evaluation for feedback into further development.

It is worth mentioning here that the design and development process of training material is anything but linear. It's very iterative but it's a challenge and a difficulty to capture this in a document such as this guide. Throughout the process it's important to remember that stage evaluation is paramount and going back for modification maintains the integrity and relevance of the material.

Design processes are always divided into steps and phases in order to make sure that checks and tests are carried out at the appropriate time to avoid any lengthy and costly time consuming modifications at the end.

There are 4 key overarching principles to any design process – the 4Cs:

1. **Clarity:** Working groups and design teams need to take their time at the onset of any course design process to achieve and agree clarity on several issues including: Purpose of the course, target group, aims and objectives, learning outcomes, process plan, responsibilities, piloting and testing, evaluation, etc. The more this is given time and attention the better and smoother the process that follows will run. If there is any disagreement on the fundamentals, it is going to affect almost every aspect of the design and development process and will be a constant insurmountable obstacle. It's also important not to leave anything to assumptions of any kind.

2. **Capacity:** Assessing the required capacity of the design and development team, those who will be involved in the administration and logistics of piloting and running the courses and the overall management team is also fundamental. Training courses are different and each requires a set of skills and expertise unique from another depending on the context it runs in. Making sure that the right team is put together and given adequate resources is another fundamental principle in training design and development. Time should also be taken in assembling the appropriate capacity package whether human resources and expertise or material and non-tangible.
3. **Consistency:** Consistency of approach once agreed upon maintains the quality of the design process. Once there is clarity on aims and objectives and the design team moves into the details of methods and training approach and techniques, it's important to stay consistent with what the training is trying to achieve and stay focused on the main purpose. Design and development processes get derailed by losing focus or trying to follow fads and gimmicks in training that might not be suitable to the purpose of the course. It's also important that the design team sticks with the process from beginning to end. If team members have to be substituted, it's important that there is enough overlap/hand over period so new members can join in, bringing in fresh and new ideas without disrupting an on-going process especially when it's farther down the line.
4. **Commitment:** This is largely what makes or breaks any design and development process. Commitment not just of the design team but of all stakeholders involved in terms of supporting the design team efforts financially, administratively, logistically, etc. The best design efforts falter and cannot be sustained when there is lack of commitment.

Coordination

1. Coordination

Coordinating a training course requires a variety of steps, tasks, and skills. Although a lot of training coordination takes place during the design phase, coordination is very important during all phases of the training process. Coordination begins at the time training is proposed and continues even after it is delivered and participants leave.

The various "hats" a training coordinator wears include communication manager, materials producer, problem-solver, and even entertainment director. In short, coordinating training requires endless management of many details and people. This section covers pre-training planning and checklists to be taken into account early on in the process.

1.1 Pre-Training Planning

One of the first and most important steps in pre-training planning is to identify and agree on roles and responsibilities before posts are even filled. Terms of reference should also be drawn for the following set of roles:

MANAGEMENT	MATERIALS DEVELOPMENT	TRAINING
<ul style="list-style-type: none"> • Programme Manager • Training Coordinator • Administrative Assistant 	<ul style="list-style-type: none"> • Curriculum Developer • Content Specialist • Curriculum Writer • Curriculum Editor • Graphic Designer 	<ul style="list-style-type: none"> • Training Facilitators • Training Co-Facilitators

For clarity of responsibilities the Programme Manager is usually and typically the MSB Programme Officer and in a case of a project that has a strong training component MSB's Programme Officer is also the Programme Manager. The Training Coordinator, on the other hand, could be someone in the counter-part agency or the organisation targeted by the training and/or based in the country

where the training is planned. These two are different from the Lead Material Development Specialist (also known as Curriculum Developer), who in some cases could be a hired consultant. The Administrative Assistant is a self-explanatory term and someone who reports to the Training Coordinator and is responsible for the details of training admin and logistics.

1.2 Training Logistics Checklist

The following checklist will be referred to time and time again throughout the design and development process. It’s important to consider it as early as possible since some of the decisions made at this stage will have fundamental implications on the material design and content. Reflecting back on the iterative nature of the design process some of the information in the following checklist should come from the training needs assessment, which is covered in the following section.

WHAT YOU NEED TO KNOW	WHERE TO FIND THE ANSWER	HOW TO FIND THE ANSWER (STEPS)	TEAM NOTES
Training schedule/structure			
Optimal number of training days			
Spread of training over one or more weeks			
Best days of the week			
Best time of the day			
Length of each session			

TRAINING LOCATION			
Access			
Comfort	Comfort		
Training facility			
Accommodation			
Supplies on-site			
Food and drink			
ADVERTISING			
Lead time for advertising			
Information for nomination and enrolment			
Direct invitations			
Other advertising ideas			
REGISTRATION			
Online or by email			
By post			
Other ways of registration			

Needs Assessment

2. Needs Assessment

The following four central questions must be answered before you begin designing a training course.

- **Audience:** Who is the target audience for a proposed training?
- **Current roles:** What do members of this target audience presently do in their roles?
- **Knowledge gaps:** What gaps exist between what these providers know how to do, and what they need to know to carry out their roles successfully?
- **Outcome:** Will training help fill this gap?

These questions form the foundation of a training needs assessment. For example, a curriculum developer or trainer must first understand what civil defence, civil contingency or disaster management personnel presently do in their jobs and how training could change the nature of their work. As a result, they will be better able to determine what knowledge and skills needed. However, it is important to keep in mind that training is only part of a solution to meet professional needs identified in needs assessment. Other changes - in addition to training - may be needed in order to completely fill a learning gap.

In addition, adult learners' particular learning needs are important considerations when designing training. Understanding those needs is part of the needs assessment phase.

2.1 Assessing Needs

The first step in building a training course is identifying the needs of target participants. There is a variety of methods for conducting a needs assessment. An in-depth Key Informant Survey can also be used to provide further details and insights into needs and overall course design approach and material focus.

A Need: A “need” refers to the gap between what is and what could or should be within a particular context, leading to strategies aimed at eliminating the gap between what is and should or could be.

Needs Assessment: Program-based needs assessment is:

- a. A systematic inquiry for the purposes of identifying priorities and making decisions, and
- b. Allocating finite resources in a manner consistent with identified program goals and objectives. Needs assessment includes:
 - Identifying and analysing expressed and unexpressed needs.
 - A plan to develop strategies that address such needs.

The following key questions need to be posed in any needs assessment:

- What do the participants need to know and do as a result of this training?
- What do we need to know about the course participants and the population they serve?

Key tasks in any needs assessment will include, but not limited to, the following:

Determine the target population

- Identify what type of professionals the course is designed for.

Determine the participants' needs¹

- Draw from your past experience with similar groups
- Gather information from informal discussions among professionals in the network
- Conduct surveys
- Conduct focus groups
- Work with an advisory panel
- Observe participants
- Interview participants
- Learn about critical incidents
- Determine what emerging data should be distributed

¹ See for example:

- www.e-trainingmanuals.com.au
- <http://www.go2itech.org/HTML/TT06/toolkit/assessment/needs.html>

Understand the participants' characteristics

- Experience
- Cultural background
- Education
- Location
- Mind set/Motivation
- Constraints (location, job demands, etc.)

2.2 Adult Learners

It is radically different to design training courses and material for adults than any other group. Adult learning follows certain principles listed below and adapted from: Malcolm S. Knowles, Elwood E. Holton III, & Richard A. Swanson, (2005) *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*, Burlington, MA: Elsevier.

1. Adults are often concerned that participating in a group will make them look weak, either professionally or personally.
 - Design training workshops, educational exercises, and discussion sessions that help people feel safe enough to ask questions and confident that they will be respected.
 - Don't ask people to take risks too early in a workshop or course (for example, engaging in a role play exercise) unless they already know each other well.
 - Provide opportunities and allow time for people to establish themselves in the group.

2. Adults bring a great deal of experience and knowledge to any learning situation.
 - Show respect for participants' experience by asking them to share ideas, opinions, and knowledge. Verbally recognise that they may be a good resource for reaching your teaching goals.
 - A needs assessment can tell you more about the individuals in the group. Or, if you already know the participants, you may realise that particular individuals can provide helpful input before, during, or after your session(s) - see point 5 below.

3. Adults are decision-makers and self-directed learners.
 - Do not seek to make people obey you. Adults will do what they need to do.
 - Be the “guide on the side” rather than the “sage on the stage”.
 - Listen to what they want and need and be flexible in your planning. Seek feedback from the group. Change your approach if your agenda or methods are not working.

4. Adults are motivated by information or tasks that they find meaningful.
 - Conduct some type of needs assessment so that you are aware of what people want (and need) to learn, how much they already know, and the kinds of “generative themes” that might affect their attention span.
 - Generative themes are concerns/issues that are most important in a person’s life.
 - Generative themes may enhance or challenge a person’s ability to learn.
 - They could include such things as the fear of losing a job, the health of a loved one, the desire for a promotion, the need for a change, the pending birth of a child, problems in a relationship, or new possibilities for growth and development.

5. Adults have many responsibilities and can be impatient when their time is wasted.
 - Be thoughtful and kind.
 - Begin and end your session on time.
 - Understand who is in the audience and why they are participating.
 - Learn what questions they have about the subject.
 - Don’t cover material they already know unless there is a good reason for it.
 - Recognise that your subject is only one of many that participants may be interested in learning more about.

The following are more specific tips and style in adult learning:

ADULTS LEARN BEST WHEN	MATCHING ADULT LEARNING NEEDS WITH APPROPRIATE METHODS
They feel valued and respected for the experiences and perspectives they bring to the training situation.	Elicit participants' experiences and perspectives through a variety of stimulating activities.
The learning experience is active rather than passive.	Actively engage participants in their learning experience through discussion and a variety of activities.
The learning experience actually fills their immediate needs.	Identify participants' needs; develop training concepts and learning objectives to these identified needs.
They accept responsibility for their own learning.	Make sure that training content and skills are directly relevant to participants' experiences so that they will want to learn.
Their learning is self directed and meaningful to them	Involve participants in deciding on the content and skills that will be covered during the training.
Their learning experience addresses ideas, feelings, and actions.	Use multiple training methods that address knowledge, attitudes, and skills.
New material relates to what participants already know	Use training methods that enable participants to establish this relationship and integrate new material
The learning environment is conducive to learning.	Take measures to ensure that the physical and social environment (training space) is safe, comfortable, and enjoyable
Learning is applied immediately.	Provide opportunities for participants to apply the new information and skills they have learned.
Learning is reinforced.	Use training methods that allow participants to practice new skills and receive prompt, reinforcing feedback.
Learning occurs in small groups.	Use training methods that encourage participants to explore feelings, attitudes, and skills with other learners.
The trainer values participants' contributions as both learners and teachers.	Encourage participants to share their expertise and experiences with others in the training.

LEARNING STYLES	CONSIDER USING
Learn best with abstract concepts and lectures	Case studies and discussions about theories and research
Learn best while observing others	Demonstrations and videos
Learn best from exercises	Role playing and other experiential activities
Learn best through visual means	Videos, images, and slides

It is also important to recognise that people learn differently and that there are several learning styles. Training courses that recognise different types of learners and caters for their needs succeed a lot more in achieving their objectives than the ones that try to funnel all participants through a rigid narrow way of single or uni-learning mode.

Generally there are four modes of learning and people could be one or another or even switch between different modes depending on the subject matter:

- **Doer:** Likes to be actively involved in the learning process, wants to know how he or she will apply learning in the real world, likes information presented clearly and concisely.
- **Feeler:** People-oriented, expressive, focuses on feelings and emotions, thrives in open, unstructured learning environment.
- **Thinker:** Relies on logic and reason, likes to share ideas and concepts, analyses and evaluates, enjoys independent work.
- **Observer:** Likes to watch and listen, tends to be reserved, will take his or her time before participating, and thrives on learning through discovery.



*Training within the West Africa Disaster Management
Capacity Building project.
Photo: MSB*

Design

3. Design

Designing a training course is like mapping out a road trip or creating a journey. A training design is basically an outline of all the “what, where, who, when and how” details of the training for use by coordinators, curriculum developers, and trainers. There are five primary components of a training design:

- **Learning Outcomes:** What will participants be able to do as a result of completing the training?
- **Training Materials:** What materials need to be developed and what will the materials include?
- **Trainers and Content Experts:** Who will facilitate the training and act as content experts to review materials?
- **Training Methods:** What methods will be used so that participants meet the learning objectives and learn the content most effectively?
- **Logistics:** Where and when will the training take place? Who will be invited and how will they be notified? Will a per diem be paid to participants? Etc.

Optimally, the results of a needs assessment inform these five training design components. For example, if we know the gap between what a target audience knows and what it needs to know, we can write learning outcome statements that precisely meet their job-related needs. Needs assessment will also help determine who will be needed as content experts for the training, and whether a course should be one, three, or five days long.

3.1 Course Design Process

Course design refers to the planning and structuring of a course to achieve specific instructional goals. The course design process includes the following activities:

- Identifying appropriate goals
- Choosing content that's consistent with the goals
- Selecting ways to achieve the goals
- Assessing participant learning in relation to the goals

As part of the design process, instructors should also consider:

- Their own teaching style
- The learning styles of the participants
- The role of the course in the overall training effort

Before training begins

Most design decisions must be made before the first session of the course. These decisions relate to these basic areas:

- The content to include
- The delivery methods to use
- The time allocated for each of the goals
- The tools for assessing participant learning

During the training session

As you conduct the training, we will learn more about the participants and their needs. This information may require adjustments in the course design. For example, after working with the group, we may decide to:

- Change the time allocation for a particular topic
- Change the type of activity associated with a particular topic, for instance, from an individual to a group activity or vice versa

At the conclusion of the session

The information we gather at the conclusion of a training session will help us assess the effectiveness of the current training and help improve future training sessions. To evaluate the course:

- Use appropriate evaluation tools and our own perceptions

Going into further detail of curriculum design the following checklist and questions are used as guidance:

Complete this training worksheet to help you begin designing your training.

1. **General theme or topic:** In general, what knowledge and skill areas will be the focus of the training?
2. **Goals and objectives:** What do we want participants to learn during the training? (What will they leave knowing more about or what new skills will they have acquired?)
3. **Essential questions:** What central questions do we want participants answering as the training unfolds?
4. **Summary of participant activities:** How will participants accomplish curriculum objectives and answer the questions in numbers 2 and 3 above? (e.g. small group discussions and projects, lectures, role-playing.)
5. **Resources:** What resources might the trainer use to help participants accomplish curriculum objectives? (e.g. current research, guest speakers, discussions, encouragement)
6. **Assessment activities:** How will we determine if participants a) have reached curriculum objectives identified in number 2 above; and b) can answer the questions in number 3.
7. **Evaluation of the training and the training process:** How will we evaluate the quality and usefulness of the training as well as its implementation?

3.2 Learning Outcomes

Learning objectives are central to designing a training course. They must reflect the needs assessment results and work in harmony with training methods and design. A learning outcome is a statement of what a learner is expected to know, understand, or be able to do as a result of a learning process. There are several ways of developing appropriate learning outcomes/objectives. Beginning a learning objective with a strong verb can help guide the development of training because it focuses attention on what participants are supposed to be able to DO after they complete training.

The following are just a few examples of standard verbs used to start a learning outcome or objective statement:

FACT	ANALYSIS	UNDERSTANDING	APPLICATION	ATTITUDE
Define	Solve	Discuss	Compute	Show sensitivity
List	Categorise	Identify	Operate	Accept responsibility
Recall	Distinguish	Express	Apply	Be willing to assist
Name	Appraise	Describe	Demonstrate	Respect opinions
Repeat	Differentiate	Translate	Perform	Demonstrate com- mitment
Recognise	Classify	Convert	Use	
Record	Compare	Explain	Illustrate	
State	Critique	Restate	Interpret	
Label	Contrast	Estimate	Practice	

There are specific reasons why learning outcomes and objectives should be well thought through and clearly stated from the outset and before any design activities take place. These are:

- Identifying outcomes is an effective way to review curriculum and content. This leads to a more balanced and well-sequenced curriculum.
- It helps design appropriate assessment and evaluation tools that accurately reflect the curriculum.
- By reviewing the needs assessment, trainers know what participants know and need, and the learning outcomes help inform everyone as to what new materials or skills they are intended to learn.
- Trainers are able to evaluate the effectiveness of their teaching. Have the outcomes been achieved?
- An instructional shift from teaching to learning is facilitated. The focus is on the learner rather than the trainer.
- Participants will know exactly what they are expected to learn, thus avoiding ambiguity.
- If you build participant learning assessments into the training, participants will know exactly how their learning will be assessed.

- Participants begin to take more responsibility for their own learning when they know what they are expected to do and what standard they are expected to achieve.

At the stage of writing learning outcomes and objectives, the following questions need to be considered:

- What information or content do we want participants to learn from the training?
- What do we want them to do with that information?
- What skills or competencies do we want them to gain, develop, expand, or improve?
- What kind of higher-level thinking do we want them to engage in?
- How do we expect participants to demonstrate what they have learned and how well they have learned it?
- At the very minimum, what should participants know and be able to do when they finish the training?
- How do we think they will be able to use the information and skills that they develop?
- If someone asks the participants what they learned from your training, how would we like them to answer?

There are four major steps to any training design process:

STEP 1:

It is much better to sketch out the whole curriculum before going into the specifics. Think about the big picture:

- What is the major aim of the training?
- What is it trying to achieve?

WRITE a goal or aim statement. This should be a broad, general statement, such as; participants will be able to understand the importance of disaster risk reduction along side preparedness and response.

STEP 2:

CONSIDER the overall scope of training.

Specify the major topics or sections of the training by brainstorming (with others) and making a list.

- What sort of things do we want the participants to learn?

At this level the outcome statements will be quite broad referring to such areas that cover the whole subject.

For example: It is anticipated that participants who successfully complete the training will be able to:

1. Establish a common understanding of the tenets on which lie the foundations of disaster risk reduction (DRR).
2. Develop a better understanding of preparedness, response and recovery as integral to disaster risk reduction.
3. Illustrate the role of different stakeholders in DRR, the integrated nature between the sectors in DRR and the importance of coordination between stakeholders.
4. Introduce and discuss the already put in place mechanisms for reducing disaster losses and risk management, focused on their region.
5. Build a network among the participants by sharing the experience, existing know-how and team building.

STEP 3:

The next step is to **IDENTIFY** specifics. Brainstorm and create a list. This is where we will write clear, precise statements detailing what the participants will actually be doing.

- What specific, detailed knowledge, information, or skills do we expect participants to learn from the training?
- What cross cutting issues need to be included and which ones to be prioritised (gender, environment, etc.)?

For example: It is anticipated that participants who successfully complete the training will be able to:

1. Acquire the conceptual basis to appreciate the complexities of vulnerability, risk and disaster risk management.

2. Develop a better ability to engage with and relate to disaster professionals from various disciplines in a field situation.
3. Increased ability to use tools and mechanisms to analyse hazards, vulnerability and capacities and acquire basic skills in risk identification and assessment.
4. Identify strategies for building a disaster risk reduction capacity.
5. Ability to advocate and promote DRR for government buy-in.

STEP 4:

THINK about how participants can demonstrate their learning, i.e., exactly what they should be able to do. Brainstorm and generate a list of ideas for how participants can demonstrate what, how much, and how well they have learned.

Development

4. Development

If the design phase of training is like creating a blueprint for a house, the development phase is the actual hammer-and-nails construction. We know what we want to build and how we want to build it. Now we must take the right materials and build a solid structure. Just as with a house, we should consider how occupants would use and navigate through training structure.

Developing training involves writing materials, creating learning exercises, and working with content experts and trainers. It is the most time-consuming phase of training; draft materials may go through multiple revisions, involving several people, before they are ready for training use.

As we progress through this development phase, we need to make sure the training materials and exercises match the learning outcomes we identified in the design phase, which are based on the needs assessment. All subsequent training phases should reflect these outcomes.

4.1 Developing Material

When good content is matched with an appropriate design, even the most complex documents become appealing, credible, and easy to read. In fact, studies have shown that using the right design elements can have a positive impact on how well readers understand the material.

Curriculum and material development usually include the following:

A. Background and descriptive information.

1. Basis of the curricula (why it was developed)
2. Target audience
3. Other relevant information explaining the material and supporting its use in a different setting
4. Resources supporting the content, (e.g. citations, web links, prototype materials, tools, and guidelines)
5. Copyright and contact information

B. Directions on how to use the curricula.

1. Guidance on using adult learning principles
2. Specific tips to improve learning
3. Outcome and competency statements
4. Suggestions on adapting the curricula and supporting materials for a different target audience or for a different context

C. Course planning forms and checklists.

1. Materials, equipment, and facility specifications
2. Unit or module overviews with key messages
3. Scope and sequence guidelines, (e.g. sample course outline or agenda with timeframe)

D. Guidance on tailoring each particular workshop so it matches the needs or wants of participants, or fits a program's needs.

1. Topic-specific materials and questions to help trainers gather needs assessment data that helps determine what participants want or need to learn; and what skills they wish or need to develop
2. Materials may include:
 - Questionnaires or discussion questions for gathering information from potential participants and/or their supervisors before the training
 - Questionnaires to be collected at the beginning of a training session
 - Suggested questions that trainers can ask at the beginning of the training
 - Exercises that help participants think about their own learning objectives
 - Pre-tests or activities to determine what participants already know; or what they want to learn
3. Suggestions for revising the training so it better addresses the needs of the group
4. Optional sessions, when relevant

E. Specific, measurable, and realistic learning objectives.

1. Learning objectives explaining what participants should know or be able to do as a result of the training or learning activity.
2. Objectives should be specific. They should state specific knowledge, attitudes, or skills that a participant should be able to demonstrate.
3. Objectives should be measurable. It should be possible by observation, testing, problem-solving exercises, or some other means of evaluation to determine whether participants have achieved the anticipated learning objective.
4. Objectives should be achievable and realistic. Learning objectives describe expectations of knowledge, attitude, or behavior change that are realistic given the instruction conditions (e.g. training time and size of the group).

F. Clear and complete course content.

1. Course outline including content, learning activities, directions, and timeframes
2. Easily understandable presentation notes with support materials for each session (e.g. PowerPoint, overheads, participant worksheets, and handouts)
3. Include important teaching points for the trainer to introduce, discuss, or address
4. Active learning exercises (e.g. role plays, group discussions, case studies, brainstorming, and skills practice) providing opportunities for participants to clarify, question, apply, and consolidate new knowledge
5. Participant handouts and other course material easily understood by participants
6. Accurate and appropriate technical content
7. Ordered content with information moving from basic to specialized, and from simple to complex
8. Suggestions for presenting the material
9. Participant opportunities for building on what they've previously learned

G. Integrated evaluation plan/tools.

1. Methodology and tools for assessing participants' learning and progress, (i.e. evaluation)
2. Evaluation instrument(s) should measure:
 - **Process** - to get immediate feedback about the workshop experience, (e.g. content usefulness and quality; trainer/facilitator's helpfulness and applicable experience; adequacy of the handouts or other materials, facilities, workshop registration/preparation, etc.)
 - **Outcome** - to measure participants' immediate changes in knowledge, attitude, or behavior based upon exposure to the training session or course, (e.g., pre- and post-training questionnaires or tests, open-ended questions, interviews, exercises)
 - **Impact** - to measure longer-term training outcomes, (e.g. guidelines for conducting follow-up interviews, site-visit procedures, and suggestions of markers for measuring longer-term outcomes)
3. Evaluation questions linked to specific learning objectives.
4. Participants' suggestions on improving future workshops of this type
5. Trainer/facilitator self-evaluation form.
6. Observer form for giving feedback to trainer/facilitator.

Once we have developed a course document's basic content, the publication development process generally proceeds in two stages:

7. The **draft stage** – all design team members have input on all aspects of the project: Planning, Content Development, Draft Layout and a Preliminary Review.
8. The **final stage** – the final layout incorporates the final text and images; the materials are sent to the printer: Final Layout, Final Review, Printing, and After Printing

1. Draft Stage

PLANNING	
Step 1	Description
Planning meeting	<p>It's important to start this process out on the right foot. Begin by having the project lead arrange a meeting with key project, editorial, and graphics staff to discuss:</p> <ul style="list-style-type: none"> • goals and priorities • audience • dissemination plans • translation plans • timeline • budget/printing options <p>The project team should bring sample designs if they have a particular style in mind.</p>

CONTENT DEVELOPMENT				
Step 2	Description	Est. Timeline	Date Due	Staff Lead
Draft text	Author(s) plans and prepares draft text. If multiple authors provide material, the project lead must compile text.			
Word processing	Support person cleans up text per accepted style manual.			
Editing	An editor usually ensures that the document is well organised, clear, and cohesive, and that it fulfils readers' needs. This fresh set of eyes is very helpful to those involved in creating the document.			
Reviewer input	Project lead obtains programmatic input from relevant reviewers, internally and/or externally.			
Incorporate reviewer input	Project lead incorporates reviewer input. If input is substantial, project lead may want to work with the editor to incorporate changes.			
Proofreading	Prior to finalising text, project lead arranges for proofing by a designated proof reader. Using someone unfamiliar with the document is usually best.			

DRAFT LAYOUT AND PRELIMINARY REVIEW				
Step 3	Description	Est. Timeline	Date Due	Staff Lead
Preliminary design concepts	Graphics lead drafts one or more designs for the team to review. The project lead provides graphics staff with the draft text and any images or supporting graphics.			
Brief meeting	Graphics and project leads review the preliminary designs and discuss refinements if needed. The writer is often at these meetings. Everyone is clear on the time the printer needs to complete the project.			
Photo selection, illustration	If needed, the graphics team searches for new photos or creates illustrations. Project lead must obtain permission for using proprietary images.			
Initial layout	Graphics team flows in the initial text and places the graphic elements.			
Team review of designs and initial layout	The project team may review and comment on all design aspects and consider how the text reads in layout form. We recommend having all relevant team members and reviewers provide input at this time.			
Discussion	Project lead and graphics staff should meet to discuss refinements.			
Revisions	If text changes are needed, project lead consults with graphics to determine how changes should be incorporated (for example, into a new Word file vs. existing design files). If significant layout changes are needed, team must return to the "Preliminary Design Concepts" stage.			
Finalise specs	Project lead and graphics staff finalise printing specifications. This is the "last call" for decisions about the size, number of colours, binding, etc.			

2. Final Stage

FINAL LAYOUT AND FINAL REVIEW				
Step 1	Description	Est. Timeline	Date Due	Staff Lead
Text finalised	Project lead finalises content. He or she has incorporated into the "Final": <ul style="list-style-type: none"> • All team input. • All sections and images. 			
Design refinement and layout of final text	The project lead gives final text to the graphics lead in electronic form. This also is the "last call" for images.			
Final team review	Project lead (and relevant staff if needed) confirms that the final version is acceptable. Only typos can be corrected at this time.			
Final revisions	Project lead goes through final revisions. Only minor changes, if any, can be made at this point. Significant revisions will result in serious delays.			
PRINTING				
Step 2	Description	Est. Timeline	Date Due	Staff Lead
Files preparation for printer	Graphics staff packages files for printer (after adjusting resolution of images, performing final colour corrections, etc.).			
Printer proofs	Graphics staff and project lead review proofs from printer.			
Press check	Press check by graphics staff or project lead is recommended for most jobs.			

AFTER PRINTING				
Step 3	Description	Est. Timeline	Date Due	Staff Lead
Boxes arrive from printer	Project lead ensures that a plan is in place for moving boxes to an acceptable storage place; or has a plan for distributing the materials.			
Incorporate changes into Word file	If the original Word file might be used for other purposes, the project lead ensures the incorporation of changes made during final layout review.			
Celebration!	Be sure to take time to celebrate your accomplishment!			

4.2 Developing Presentations

Developing presentations is an extremely individual activity and each trainer/facilitator will have their own style and preference. But in designing coherent courses, it's important to adhere to a common style and format. Personal style and approach shows more in delivery. It is disorienting for participants to view presentations with different format and style every time a new trainer comes on. There are guidelines for developing presentations which trainers can adhere to without compromising their individuality.

- 1. Begin with a greeting and a few friendly words.**
 "Good afternoon and it's a pleasure taking part in this course. I would like to begin by asking you a question."
- 2. State a question that grabs their imagination.**
 "Like me, you have all seen your share of disasters. Do you ever wonder what we could do to reduce risk and the occurrence of disasters and not just develop better response?"
- 3. Give your name and a brief credential.**
 "As many of you know, my name is _____, and I'm a _____ at _____. I have spent a number of years working on _____." (Write it out for people to see.)

4. **Follow with a promise of rewards for listening**
“This afternoon I would like to explain what I have recently learned about how we can each do more to develop adequate risk reduction mechanisms in_____. I will take about 30 minutes to tell you about the national guidelines for _____. I will then ask you to share with me your own concerns about implementing these guidelines at _____.”
5. **Let people know when you will take questions and comments.**
“Please feel free to interrupt me at any time with questions or comments.” Or “I would like to go through the presentation first in full and then have a following Q&A time, so please note down any questions or comments as we go along”.
6. **Explain topic by answering three questions: What? How? Why?** (or you could structure the body of the presentation around Past, Present, and Future)
7. **Describe the benefits of audience concern.**
“We are the people who can make a difference for our population. In order to make an even bigger difference than we do now, I have a favour to ask you. Would you please ... (for example, read this handout, talk to your colleagues, participate in a working group, tell me what else you need to know in order to improve our practice, implement a new policy, etc.).”
8. **Conclude with a positive, hopeful note of encouragement.**
“Life is short and precious. It’s not often that we get a chance to implement a program that will improve the lives of others and make our own community a better and safer place to live. By fully implementing the procedures for mitigation and risk reduction, we take an important step in making our communities safer. Thank you.”

Delivery

5. Delivery

The delivery phase of training is when the coordination, assessment of learning needs, design, and development phases come together. Successful training delivery depends on:

- Accurate identification of participants' training needs
- A carefully crafted training plan
- Well-managed training details
- Thorough and relevant materials
- Prepared trainers, ready to present a compelling learning experience

While the other steps of the training process focus heavily on creating the content of the training, the delivery or implementation phase is concerned with teaching the content and participant learning. Now that you have built your house, you want to invite people in to experience what you have created.

5.1 Training Methods

There is a huge array and variety of training methods each with its advantages and disadvantages. In designing a course, a healthy mix of a few methods provides variety, overcomes monotony and boredom and energises participants. But the mix is not an end in itself. Training methods need to be carefully selected to match the purpose and learning outcomes of each session. The following is a summary to guide such selection:

METHOD	ADVANTAGES	POSSIBLE DISADVANTAGES	COMMENTS
INFORMATIONAL			
Lecture Lecture-Forum (with question cards or question/answer period)	Conveys large sum of information; fast; efficient forum allows exploration of content in more detail.	Audience is largely passive.	Trainer should be an interesting speaker, able to self-limit and stick to time, be able to facilitate questions effectively.
Panel Panel forum	Adds different points of view to content.	Audience is largely passive with exception of expanding panel; expanding panel not practical with groups larger than 20.	Leader must express solid set of ground rules and have skills to enforce them.
Debate	Provides different points of view; thought-provoking.	Audience is largely passive.	Same as for panel.
Presentation Presentation with Listening Teams (participants given listening assignment before presentation question speaker afterward) Presentation with Reaction Panel (small group listens and forms panel following presentation)	Keeps participants interested and involved. Resources can be discovered and shared. Learning can be observed. Lots of information; fast; new points of view; a more organised question-and-answer format; reaction panel can speak.	Learning points can be confusing or lost. A few participants may dominate the discussion. Time control is more difficult. Audience is largely passive; reaction panel may not represent all views of the group. Trainer orally presents new information to the group.	Trainer should structure listening assignment with clear purpose; must select panellists from a cross-section of the group.

<p>Group Discussion (of given topic) Buzz Groups (short, time-limited discussion on given subject)</p>	<p>Keeps participants interested and involved. Resources can be discovered and shared. Learning can be observed. Participants are active; allows chance to hear other points of view; quieter people can express viewpoints and ideas.</p>	<p>Learning points can be confusing or lost. A few participants may dominate the discussion. Time control is more difficult. Inexperienced leader may be unable to use format for attitudinal purposes.</p>	<p>Trainer divides large group into small groups; groups of 4–6 are most effective. Small group has a short time to discuss a topic or solve a problem Trainer should be able to give clear instructions and keep discussion on target. Main function is judging when to cut off discussion.</p>
<p>Brainstorming</p>	<p>Can get all participants involved in collecting a lot of information. Quickly generate ideas. Good for problem-solving; quick change of pace; filler; allows all to participate; validates ideas of group.</p>	<p>The problem/issue must be clearly defined. Time control is more difficult. Need clear trigger questions and evaluation/discussion afterwards; somewhat over-used method; requires careful facilitation.</p>	<p>For idea generation and creative group thinking; all participants present many ideas as rapidly as possible on a problem or issue. Then group organizes list into categories for further discussion. Do not evaluate, criticize, omit, or discuss contributions until all are written; record in contributor's own words; use another person to record if possible.</p>

METHOD	ADVANTAGES	POSSIBLE DISADVANTAGES	COMMENTS
ATTITUDINAL			
<p>Task Groups</p>	<p>Sustained interaction allows quieter people to express themselves; validates participants.</p>	<p>Time consuming; requires great degree of self-direction and group maturity.</p>	<p>Keep groups small and diverse with sustained interaction and clear purpose.</p>

METHOD	ADVANTAGES	POSSIBLE DISADVANTAGES	COMMENTS
BEHAVIOURAL			
Role-Play Mini-Role-Play	<p>Helps retention. Allows participants to practice new skills in a controlled environment. Participants are actively involved. Observers can impact attitude and behaviour.</p>	<p>Requires preparation time. May be difficult to tailor to all situations. Needs sufficient class time for exercise completion and feedback. Requires maturity and willingness of groups; requires trainer have excellent facilitation skills.</p>	<p>Participants act out problem-solving situations similar to those they will encounter in their workplace. Trainer needs skill and understanding—must get people into roles, give directions, and establish a climate of trust. Trainer needs insight into how an activity may pose a threat to some individuals; ability to help group process & de-brief. Use in well-formed group. Can be structured into dyad, triad, and fishbowl.</p>
“Movie” (role-play assisted by feedback, “more__ or less __”)	Useful in rehearsing new skills, behaviours.	(Same as for role-play, intensive and time consuming.)	
Simulation games	Intense involvement; practice skills in problem solving and decision-making.	Competitive; requires a game and possibly a consultant to help facilitate; time consuming.	A package game requires prep time for the leader to learn the rules and directions.

<p>Case study Mini-case study (problem situations for small groups to analyse) Critical incident (small section of case stating most critical or dramatic moment)</p>	<p>Requires active participant involvement. Can simulate performance required after training. Learning can be observed. Opportunity to apply new knowledge; requires judgment; good assessment tool; participants active; chance to practice skills.</p>	<p>Information must be precise and kept up-to-date. Needs sufficient class time for participants to complete the case. Participants can become too interested in the case content. Case study must be relevant to learner's needs and daily concerns.</p>	<p>Participants are given information about a situation and directed to come to a decision or solve a problem concerning the situation. Trainer needs to have knowledge and skills to "solve" the problem; may need to design own studies; compare approaches of several groups and reinforce best solutions.</p>
<p>Demonstration Demonstration with practice (by participants)</p>	<p>Aids comprehension and retention. Stimulates participants' interest. Can give participants model to follow. Allows for optional modelling of desired behaviour/skill; can be active; good for learning simple skills.</p>	<p>Must be accurate and relevant to participants. Written examples can require lengthy preparation time. Trainer demonstrations may be difficult for all participants to see well. Method more effective if participants are active; feedback must follow immediately after practice.</p>	<p>Participants are shown the correct steps for completing a task or are shown an example of a correctly completed task. Requires skill to model desired behaviour; break procedure down into simple steps; ability to provide feedback.</p>
<p>Skills practice lab (small participant groups practice together).</p>	<p>Different points of view and feedback; participant active; good for translating information into skills.</p>	<p>Group should have enough knowledge or insight to coach one another.</p>	<p>Act as a resource to groups.</p>

METHOD	ADVANTAGES	POSSIBLE DISADVANTAGES	COMMENTS
PLANNING			
<p>Group discussion with decision-making regarding a new action</p> <p>Individual or group planning session with report</p>	<p>Validates maturity and needs of group members; members have best insight into their problems and needs on-the-job; group leaves session with practical, constructive and mutual goals; groups get ideas from one another...</p>	<p>Requires mature group that can self-direct and stay on task; time consuming.</p>	<p>Leader serves as resource once directions are given.</p>

5.2 Effective Communication Skills

Good communication skills are essential when training adults. There is an abundance of resources available to provide helpful information on how to communicate most effectively with participants. These tools help develop training messages, provide facilitation tips, and offer ways to improve presentation skills for personal growth as a trainer.

The following are generic effective communication guidelines that run through the whole course and are not limited to one type of training method or another. There are three important things a facilitator can do to help create an effective learning atmosphere for course participants.

1. Support the group of participants by building an atmosphere of trust and modelling a positive attitude.

One of the most important tasks of a good facilitator is to build an atmosphere of trust. An accepting and non-threatening atmosphere encourages the expression of ideas, questions, beliefs, and attitudes by all participants. Below are some ways to build trust among the group.

- Assure that confidentiality will be maintained. Establish a group rule on the first day that everyone's confidentiality must and will be protected so that people can talk freely without fear that their comments will be shared outside the course.
- Provide constructive and supportive feedback. Let participants know when they've contributed something useful and interesting to the group. For example, you might say, "That's a very good example of the concept we are discussing."
- Model a positive attitude. Participants will probably get tired as the course progresses and need some encouragement. Call upon the person appointed as the energiser and maintain your own positive attitude. Address any difficult moments during the course with honesty and constructive comments. For example, "This topic brings up difficult feelings for many; by exploring our own feelings, we can better help our clients to do the same."

2. Ensure that the entire course content is covered.

It is important to stay on schedule and help participants see how each session follows logically from the one before.

- If participants deviate from the topic, offer to address their comments during a break.
- Write additional topics identified by participants on flip chart paper as a reminder of topics to cover if there is time remaining at the end of the session. Keep this list visible to participants throughout the workshop.
- Each session's lesson plan includes key summary points. Referring to these key points, and reviewing them at the end of a session, will help you know if you have covered all of the main content of your lesson plan.

3. Model effective facilitation skills.

Try to remember these basic facilitation strategies throughout the course:

- Ask open-ended questions. For example, you might say, "What did you learn from the role play?" instead of "Did you learn how to _____ during the role play?"
- Listen carefully to the communication and for any feelings that may accompany it.
- Rephrase participants' communications accurately for clarity, when necessary, and without judgment.
- Respect every participant's feelings, perspectives, and contributions.
- Adhere to the time schedule.
- Focus on developing skills, not just knowledge.
- Make the learning process active.
- Make the course material clear by speaking slowly and using language that is understood by all participants.



*Training within the West Africa Disaster Management
Capacity Building project.
Photo: MSB*

Evaluation

6. Evaluation

Training evaluation should take place throughout each phase of the training process, not as a last step. For example, after conducting a needs assessment, ask the design team and key informants if the needs identified are accurate. Have other trainers review written materials before finalising and printing them for training. This kind of “formative” or process evaluation helps ensure that we have developed the training with great thought and analysis at each step.

The most obvious and frequent kind of evaluation occurs immediately after training; participants complete a course evaluation form following the training but before leaving the site. Evaluation can also take place at the end of each day of training through quick “How did it go?” discussions, or even in organised focus groups with participants during the evening. Longer-term, follow-up evaluations conducted three months to a year or more after training are also a possibility. These evaluations measure how participants use their newly acquired information and skills in their professional roles.

6.1 Forms of Evaluation

These methods of formative evaluation are often used during the training delivery phase. The process allows trainers to determine how they need to adapt their training plans and delivery so that a training session or program will be most effective for participants.

1. Pre- and Post-Knowledge Test: Before you begin the content of the training, ask students to complete a knowledge-based questionnaire that asks them what they already know about the training topic.
 - Pass out the exact same questionnaire at the end of the training to gauge how their answers have changed from before the training began.
 - Keep the questions brief, no more than 10 or 12.

- Focus questions on the learning objectives. (Note: This questionnaire can also be administered during the needs analysis. You want to determine what participants already know and therefore, what you can leave out of the training or spend less and more time on).
2. **Trainer Assessment:** During breaks, the trainer(s) should assess the progress of the training. If there is more than one trainer, each trainer should provide honest and helpful feedback to each other.
- Are students engaged?
 - Was there possible confusion on any portion of the session so far?
 - Is more time needed for a particular portion of the session?
 - Are the trainers going too fast or do they need to pick up the pace?
 - Are participants interacting as a group enough?
3. **Participant Check-in:** Ask participants briefly how things are going. Find a convenient time to either hand out a half-slip of paper and ask four or five questions or ask them verbally and get feedback from the group:
- What have you learned so far in this training session that you didn't know before?
 - What would you like to know more about that was addressed so far?
 - How is the pace of the session so far? Too Fast, Too Slow, Just Right?
 - What did you like best about the morning (or afternoon) session?
 - How can the trainers make the remainder of the session most effective for you?
4. **Post-training participant feedback:** Suggested questions:
- What has gone well so far in this training?
 - What have you learned that is new?
 - What was presented that you already knew?

- What would you like to know more about?
- What can the trainer(s) do differently to make the training more effective?
- What can you as participants do to make it more effective?

There is a wide set of evaluation forms covering almost every aspect of the training. Training design teams need to decide on which ones are relevant and effective for their particular course. Overdoing it on the evaluation tires participants. Evaluating each session, at the end of each day, and at the end of the training becomes a time consuming activity. There needs to be a balance and a variety of the methods used too. At the end of each session, evaluation could be informal, verbal and in a plenary. At the end of each day evaluation could be done in a more structured way with participants breaking into small working groups and developing 4-5 key learning or feedback points for the trainers. The evaluation at the end of course needs to take a far more structured and time to achieve its aim. It could be divided into a reflection exercise involving the whole group and facilitated by one or more trainer in addition to the pre-designed formal evaluation form.

The following is just a list of the types of evaluation that could take place in any training course:

- Daily Evaluation Form
- Training Evaluation Form: Skills, Attitude, Comfort
- Training Evaluation and Learning Self Assessment
- Post-Training Summary Evaluation
- Training Observation Instrument
- Expert Observer Rating Tool
- Group Activity Observation Form
- Evaluation using Focus Groups: Topic Guide
- Trainer Attributes: Competencies Self-Assessment
- Instructional Design & Materials Evaluation Form

6.2 Process Evaluation

Process Evaluation (or Formative Evaluation) - occurs while the training is being designed, developed, and delivered. It allows trainers to determine what needs to change in their training plans and delivery so that a training session or program will be most effective for participants.

By evaluating team's process and progress as each stage is completed in the training creation process we can be sure we have addressed all the issues and taken the necessary steps that go into a successful training. Every step along the way needs to be appraised and evaluated before moving on to the next one. This covers evaluating progress in the Needs Assessment, Design, and Development stages of training development.

Process Evaluation – Needs Assessment

Needs assessment (also called a needs analysis) usually isn't thought of as a step in the evaluation process. But in fact, curriculum design, development, delivery and evaluation all circle back to the information we obtained during the needs assessment process. The evaluation conducted at the very end of training will shed light on whether or not the training adequately addressed the gaps in knowledge and skills identified during the needs assessment process.

Once the needs assessment process is completed, we need to consider its results and assess what worked, did not work, and where we need to go back and attempt to get additional information. This can be done by using the following simple checklist:

- Were the appropriate people involved in identifying the needs of target population?
- Was a comprehensive analysis conducted or were the results too narrow?
- Would additional methods provide more useful input, (e.g. a focus group or a questionnaire)?
- Would repeating a previously used method, but with more participants and information provide more useful input?
- Are more interviews needed to identify the needs of underrepresented participants?

Process Evaluation – Training Design

The journey of creating training is made up of many important pieces - coordination, ideas, steps, people, and resources. The design phase is when all these pieces come together. When finished, we will have a blueprint of what the training will look like. We get a glimpse of the bigger picture: audience; their identified needs; curriculum learning objectives, outline, and instructional methods; trainers and other resources; etc.

Content experts should review the training design before the curriculum developers begin development. They should be a part of the on-going development process. Content experts can be content professionals, former trainers of the content, and/or members of the targeted student population.

Once training design is completed, the design team needs to stand back and assess the hard work and progress so far posing the following questions:

Training-Model: *Have training designers:*

- Clearly identified participants' knowledge and skills gaps?
- Prepared the course or session by using a sequential planning model?
- Examined learning tasks for sequence: easy to more difficult, simple to complex?
- Honoured the fact that adult learners are subjects of their own lives, in the training design?
- Clearly defined content - skills, knowledge, and attitudes - that satisfy the learning objectives of the intended audience?
- Designed achievement-based objectives that can be readily evaluated?
- Created training comprehensive enough without being overwhelming?
- Created a time frame that allows the accomplishment of learning tasks?
- Planned a wide variety of teaching and learning techniques?

- Arranged for trainers with the background and instructional skills to present an effective learning experience?
- Identified good resources and materials?

Structure: *Have training designers:*

- Made sure the size of the group would promote optimal learning?
- Selected a site that lends itself to small-group work?
- Designed a warm-up exercise related to the topic and appropriate for the group?
- Created ways to teach the content through small group activities?
- Designed a time frame that allows for the accomplishment of all learning tasks?
- Planned for participants' safety?
- Set up processes and structures - small groups, breaks - to assure inclusion?
- Built in brainstorming or associative processes that discourages judging or editing?
- Planned quiet, reflective time for participants to think about what they are learning and how they might apply new knowledge and skills?
- Created closure tasks that include evaluation and end the training on a positive, hopeful tone?

Communication: *Have training designers:*

- Been in dialogue with participants prior to the course?
- Built in open questions to stimulate dialogue throughout the training?
- Instructed trainers to avoid monologues by designing for dialogue?
- Designed for optimal engagement of all, using small group work, learning tasks, affirming responses, echoing?
- Created an opportunity for small groups to examine their own group and task maintenance together?

Process Evaluation – Training Development

As material being developed, content experts should be on-hand to conduct reviews and offer suggestions. Once the course is complete, a beta or pilot test is an excellent way to identify problem areas and holes in the curriculum. Like the evaluation of the training design, using content experts, possible trainers, and members of the target population is recommended.

- Did we have adequate input from content experts?
- Did we conduct a review and/or pilot training with a good representation of stakeholders?
- Did we have enough/too much time allotted for each portion of the training?
- What content areas need more examples, statistics, case studies, etc.?
- Is there a blend of participant and instructor talk?
- Is there adequate time given to class discussion, teacher explanation/lecture, question-answer periods, group activity, and individual exercises?
- What should the trainers work on regarding classroom presence, style, and overall teaching effectiveness?
- Does the course actually meet the stated learning objectives? Do the learning objectives need to be modified?
- Have we built in adequate evaluation to assess the curriculum, the process, and participant learning and application?

Finally, it is important to reiterate that training and training design are an on-going, rather than a linear process. Questions posed above aimed at evaluating one experience should inform the following training course or future pilots if more than one is required. Regular check in with the project team, structured evaluation of each process and constant feedback loop maintain a high quality of the training material and its delivery in terms of relevance and overall impact for participants' future practice.

References

References

Center for Instructional Development and Research, University of Washington (2004) Course Design.

<http://depts.washington.edu/cidrweb/CourseDesign.html>

Centre for the Advancement of Teaching and Learning, University of Western Australia,

<http://www.catl.osds.uwa.edu.au/obe/outcomes>,

I-TECH Training Tool Kit (2004). I-TECH and Center for Health Education and Research (CHER), Seattle, USA.

JHPIEGO's Training Works! (2003)

<http://www.reproline.jhu.edu/english/6read/6training/Tngworks/>

Kirkpatrick, D. (1994) Evaluating Training Programs: The Four Levels. Berrett-Koehler, San Francisco, USA

Lawson, K. (1998) The Trainer's Handbook. Jossey-Bass, San Francisco, CA, USA.

Knowles, M.; Holton, E, and Swanson, R. (2005) The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development. Elsevier, Burlington, MA, USA.

Michele Burns, Program for Appropriate Technology and Health (PATH), <http://www.path.org/>

Renate, M and Caine, G. (1994) Making Connections: Teaching and the Human Brain. Addison Wesley Publishing Company.

Romiszowski, A. (1981) The How and Why of Performance Objectives. From Designing Instructional Systems. Kogan, London.

Swift, R. (ed.) (1997) The HEART of training: A manual of approaches to teaching about HIV/AIDS. A joint project of Cooperative Agreement Training Working Group, Special Projects of National Significance Program, HIV/AIDS Bureau, HRSA. Washington, DC, LTG Associates.

Trainer's Guide for Cancer Education, National Cancer Institute, located at <http://www.cancer.gov/clinicaltrials/resources/trainers-guide-cancer-education>

**Note about
the author**

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S-651 81 Karlstad Phone +46 (0)771-240 240 www.msb.se/en
Order No. MSB507 - December 2012 ISBN 978-91-7383-303-5