

**TRAINING
in AFRICA:
best practices,
lessons learned
and future directions**

**W O R K S H O P
P R O G R A M**

DAY I

JHPIEGO, an affiliate of Johns Hopkins University, is a nonprofit corporation working to improve the health of women and families throughout the world.
www.jhpiego.org

JHPIEGO Corporation
Training in Reproductive Health project
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Thank you.

WELCOME and ACKNOWLEDGMENTS

Welcome to Lusaka, Zambia, and to the **Training in Africa: Best Practices, Lessons Learned and Future Directions** conference. On behalf of the Conference Design Team, I would like to thank you for attending and for making a commitment to an event designed to enhance your personal and professional development.

We have planned an exciting, interactive conference focusing on best training practices used in healthcare settings, with particular emphasis on family planning and reproductive health in Africa. We know that training is one of the primary interventions for improving the performance of healthcare workers. During this conference we will look at many aspects of effective training applied in a number of formats across a variety of content areas.

During the conference we will learn about effective training in Africa, how to maximize the transfer of learning and the future of training from our general session speakers. During the Workshops we will learn about effective training approaches in an engaging, fun atmosphere. In the concurrent sessions, we will continue to have opportunities to interact with experienced training practitioners and other conference attendees. Throughout the conference we will be able to visit displays and exhibits sponsored by organizations working internationally in the training field.

Planning a conference requires the combined efforts of many people. I would first like to thank our speakers and exhibitors for their time and support. The Conference Design Team deserves a great deal of credit for creating the vision for this conference, developing the goals and objectives, creating the schedule and identifying the speakers. Members of the Conference Design Team include:

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Nancy Koskei (JHPIEGO/Kenya)	Karin Turner (USAID)
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A special thanks to Jim Griffin from the Office of Population and Reproductive Health of the United States Agency for International Development (USAID) for his constant support and guidance.

Thank you to Gretchen Kunin at JHPIEGO for her dynamic creativity in the design and production of the conference logo and materials.

Enjoy the conference.

Rick Sullivan
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JHPIEGO Corporation

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In reply please quote

No:.....

REPUBLIC OF ZAMBIA

MINISTRY OF HEALTH

10 March 2003

NDEKE HOUSE
P.O.Box 30205
LUSAKA

Dear Participant,

RE: TRAINING IN AFRICA – BEST PRACTICES, LESSONS LEARNED AND FUTURE DIRECTIONS

The Ministry of Health of the Government of the Republic of Zambia is pleased to invite you to participate in the regional conference, **Training Africa: Best Practices, Lessons Learned and Future Directors**, which will be held in Lusaka Zambia in early May 2003.

The important regional conference will allow us an opportunity to share and discuss experiences, best practices and lessons learned with each other and with a variety of international training experts and resource persons. Training is a very important part of all of our public health programmes, which represents a significant investment both, in terms of staff, time and financial resources. As a result, the ability to employ alternative methods and strategies, that will make our training more effective and achieve our objectives in improving health care services, is a critical issue. This conference will allow us the opportunity to review our own training approaches and programmes and creatively think of possible alternatives that may be more effective or more appropriate in our training for the future.

We would like to recognize our Cooperating Partners, the United States Agency for International Development (USAID) and JHPIEGO Corporation, who are providing the funding and helping to coordinate this conference. They will be providing you with additional details on the dates, venues and other logistics for the conference.

The Ministry of Health looks forward to the opportunity to share our experiences with you, and to learn from the experiences you have had in your respective countries and programmes. We eagerly await our meeting in May.

A handwritten signature in black ink, appearing to be 'S.K. Miti', enclosed in a large, loopy oval.

Dr. S.K. Miti
PERMENTN SECRETARY
MINISTRY OF HEALTH

CONFERENCE OVERVIEW

The focus of the **Training in Africa: Best Practices, Lessons Learned and Future Directions** conference is to examine best training practices used in international healthcare settings, with particular emphasis on family planning and reproductive health in Africa. In addition, training practices that have been employed successfully in sectors other than healthcare are being examined and discussed for their applicability to reproductive health programs. The conference is being organized by the JHPIEGO Corporation's Training in Reproductive Health project in collaboration with the Central Board of Health of Zambia, the Ministry of Health of Zambia, the Office of Population and Reproductive Health of the United States Agency for International Development (USAID) and a number of USAID Cooperating Agencies.

Training is one of the primary interventions for improving the performance of healthcare workers. What do we know about effective training? We know that training occurs as part of most efforts to strengthen healthcare systems and improve the quality of services. We know that training comes in many sizes and shapes, including classroom-based learning, distance learning, self-directed learning, technology-assisted learning and on-the-job training. We know that training is applied across a broad range of content areas including management, quality assurance, logistics, community education, client-provider interaction, and clinical skills. But how do we know effective training when we see it? What practices, processes and approaches work best for family planning and reproductive health in international settings?

The goals of this conference are to examine training practices identified as the best according to evidence and objective data, share lessons learned from implementing training in a variety of settings, and see what the future holds for training. During this three-day conference we will have eight skill building workshops, three general session speakers and approximately 48 concurrent sessions.

This conference is designed for individuals who have responsibilities for the design, delivery and evaluation of training interventions to improve worker performance with a focus on family planning and reproductive health. Conference participants include trainers, instructional designers, materials developers, facilitators and evaluators, as well as individuals responsible for programming and managing training interventions.

Conference sessions will feature a best practice, lesson learned or future direction as described here:

Best Practices – Training practices that have been shown to produce superior results; selected by a systematic process; and judged as exemplary, good or successfully demonstrated.

Lessons Learned – Crosscutting observations and conclusions that apply to a specific practice. Lessons are drawn from experiences with specific training practices, processes and methods. Evidence supporting the lesson is clear and objective. These lessons encompass both positive and negative experiences.

Future Directions – Trends, technology, changes in healthcare delivery systems and other factors that will shape the future of training.

Sessions are also based on the various stages of the training process as described here:

Design – This stage includes the use of information from performance needs assessments to identify the need for training and to develop learning goals and objectives, select learning methods (e.g., class-

room-based, distance learning, structured on-the-job training, technology-assisted learning), create training schedules, etc. This also includes development and testing of the training materials.

Delivery – This is when the training course or intervention is conducted.

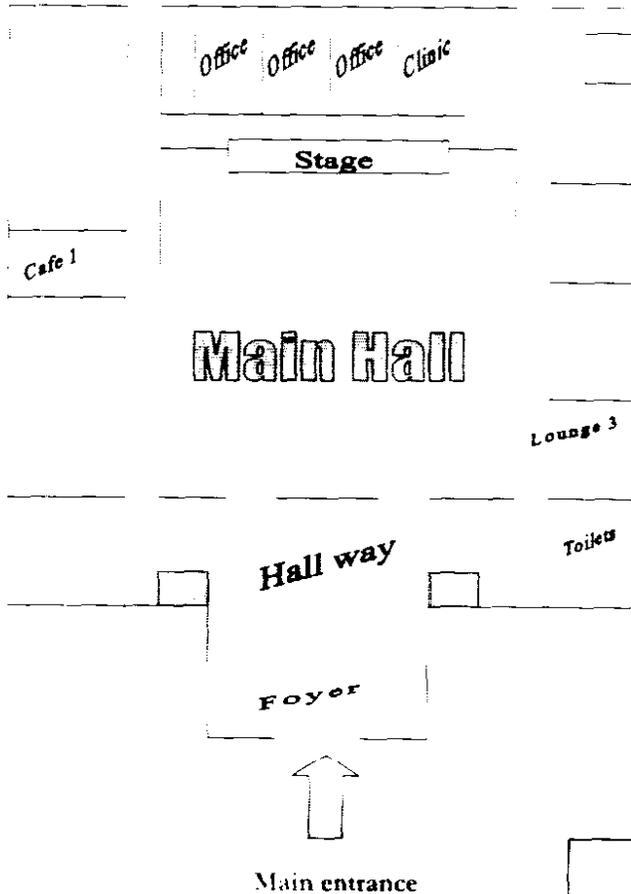
Evaluation – Determining how learners felt about the training, whether they reached the objectives, how content is applied on the job after training, and what impact it had on the situation it was designed to improve.

Transfer of Learning – Practices to help ensure that the knowledge and skills acquired during training result in improved job performance after training. Transfer of learning involves the learner, learner's supervisor and trainer through activities conducted before, during and after training.

Trainer Development – Essential for the development of a sustainable training system is the development of competent trainers who can continue to implement training as external support decreases.

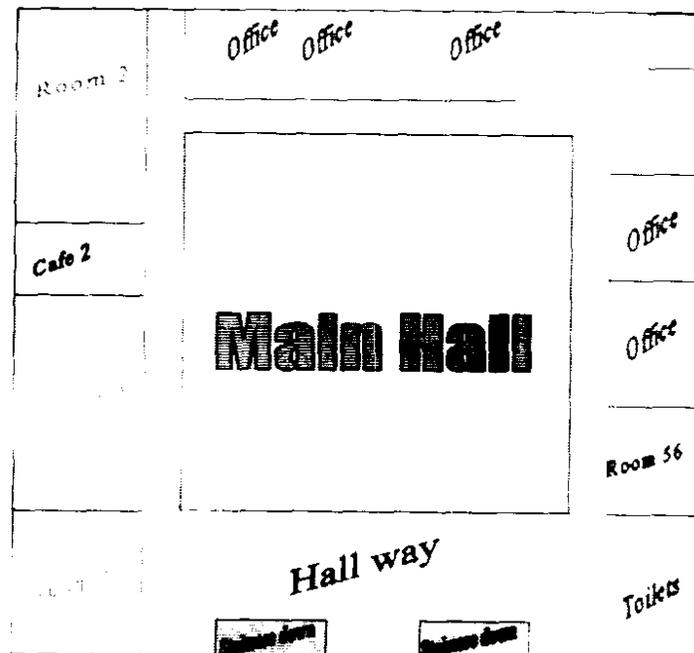
Programming Training Interventions – Approaches used by program staff to ensure that the previous areas of training are planned, funded and carried out in the field.

MAP of CONFERENCE FACILITY

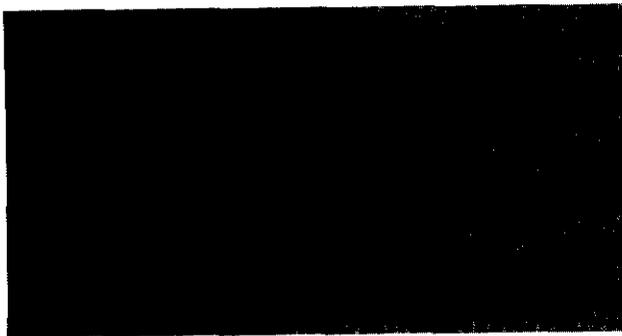


GROUND FLOOR PLAN

FIRST FLOOR PLAN



DAY I AGENDA



Room 1

Transfer of Learning: Maximizing Your Investments in Training

Rick Sullivan

JHPIEGO Corporation

WORKSHOP DESCRIPTION

Have you ever attended a training course and then never applied your new knowledge and skills on the job? Well you are not alone. Studies show only about 30% of knowledge and skills acquired during training actually result in improved job performance. Would you like 100% for your training? Then this workshop is for you. Join us to learn practical strategies you can use before, during and after training to ensure training results in improved job performance. Participants will receive a copy of **Transfer of Learning: A Guide for Strengthening the Performance of Health Care Workers** published by Prime II and JHPIEGO.

LEARNING OBJECTIVES

- Identify factors that affect worker performance and the role of training to improve job performance.
- Describe transfer of learning strategies to be completed before, during and after a training intervention.
- Develop an action plan describing how to apply the transfer of learning process in the participant's work.

Room 3

Evaluating Performance and the Effect of Training

Kama G. Garrison

JHPIEGO Corporation

WORKSHOP DESCRIPTION

Are you ever asked the question: how did training make a difference in performance? This workshop will introduce participants to the various methods for assessing provider performance and the organizational effects of training as well as the realities of how to link training outputs to organizational outcomes. The workshop will present the strategies for assessing performance and the effects of training, as well as case studies, tools and activities exemplifying various methods of assessing performance and training.

LEARNING OBJECTIVES

- Understand and describe the types of RH training evaluation (Kirkpatrick Level 1 through 4 and others).
- Clearly articulate the purposes of training evaluation.
- Describe the most appropriate evaluation training design and measures to fit the evaluation purposes.

Room 10

Learning With Technology

Natalie Maier

JHPIEGO Corporation

WORKSHOP DESCRIPTION

Are you using computers to update your knowledge? If not, you are missing out on a wealth of information available on CD-ROMs. In this workshop, you will learn about the various CD-ROM based resources that will allow you to update your knowledge on everything from training skills to family planning methods to HIV/AIDS. Many resources also include practical training tools such as PowerPoint presentations and full-text references. This will be a hands-on workshop where you will get to explore a variety of CD-ROMs from a wide range of organizations. If you have never used a computer, do not worry; this workshop is for beginning and advanced computer users alike.

LEARNING OBJECTIVES

- Identify CD-ROMs that can serve as a resource when updating your knowledge, developing training materials, and writing articles and papers.
- Navigate through a variety of CD-ROMs to find information.
- Utilize various tools on the CD-ROM such as PowerPoint presentations.

Room 2

****Interactive** Reproductive Health Training = Interesting and Innovative Training**

Maureen Kuyob

Family Health International

Bob Rice

Family Health International

Jane Schueller

Family Health International

WORKSHOP DESCRIPTION

Is your training interactive? Engaging? Creative? Learning is not an automatic consequence of pouring information into the heads of training participants — it requires the learner's involvement. To ensure real and lasting results, training needs to be fast-paced, fun and engaging. During this workshop, you will learn how to maximize learning energy and make training more interesting and innovative in e-learning, distance-

DAY I AGENDA

learning, multiple-day and shorter intervention settings. You, the participant, will help make this session a success — so come prepared with your best interactive training practices! This workshop promises to be fun and a positive learning experience for all!

LEARNING OBJECTIVES

- Identify when it is important to include interactive/participatory training techniques in order to enhance the learning of participants.
- Describe the high and low energy (and low interest) spans for participants in different training situations.
- Develop and utilize interactive/participatory training techniques.

Lounge 1

Strengthening Preservice Education Made “Easier”: Applying a Four-phased Process

Lois Schaefer

JHPIEGO Corporation

WORKSHOP DESCRIPTION

One of the most effective ways to improve service delivery practices is to improve the preparation that future providers receive in their basic education. While strengthening preservice education is never easy, it can be made easier through the use of a systematic process that has proved successful in over 20 countries. This workshop will first describe a four-phased strengthening process that addresses key components of the education system. Participants will then have the opportunity to apply the process and share their own experiences by completing a case study in small groups. Each group's work will be shared and discussed in order to further enhance understanding of the preservice strengthening process.

LEARNING OBJECTIVES

- Apply a four-phased process for strengthening both classroom and clinical teaching in preservice education.
- Identify components of the educational system that influence the preservice strengthening process and describe the role they play in that process.

Room 4

Designing Effective Learning Experiences

Nancy Kiplinger

Intrah/PRIME

WORKSHOP DESCRIPTION

Participants will be better able to choose effective training strategies, select or develop appropriate content, create engaging training materials, and develop non-traditional training approaches. The workshop will include presentation, discussion, examples, and activities to help participants design and develop effective training experiences.

LEARNING OBJECTIVES

- Choose training strategies effective for a given context.
- Select or develop appropriate content.
- Create engaging training materials.
- Develop non-traditional training approaches.

Lounge 2

Creating and Using Interactive Simulations for Training

Wallace Hannum

Intrah/UNC School of Medicine

Pauline Mububu

Intrah/PRIME Office

WORKSHOP DESCRIPTION

Participants will learn why technology-based interactive simulations can be beneficial in training, when interactive simulations are appropriate, how to create interactive simulations, and how to use simulations to reach training goals. Advantages and limitations of CD-ROM, DVD and Internet delivery of simulations will be discussed. The workshop will include presentation, discussion, examples of simulations using technology, and activities to help participants begin to create and use interactive simulations in training.

LEARNING OBJECTIVES

- Discuss advantages and limitations of using interactive simulations in training.
- Discuss requirements and options for developing and using interactive simulations in training.
- Describe the process for developing interactive simulations.
- Describe strategies and techniques that can be used in interactive simulations.

Room 13

Storytelling for Learning Transfer

Gail Rae

Population Leadership Program

WORKSHOP DESCRIPTION

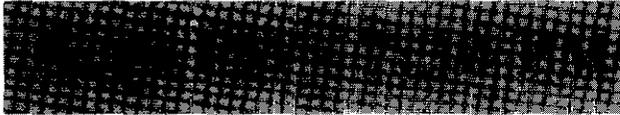
Have you noticed that the training that you remember long after you leave the session can be re-told as a story? Why are experienced practitioners rediscovering the oldest training technique in town — storytelling — and touting it as the hot, new methodology?

The power of story can be used to promote retention, motivation, and learning application. Most of all, it enables the efficient transmission of complex and multi-level information. Join us for a cutting-edge session as we skirt the edge of science and art to explore a new approach to story. During this workshop, you will match design to application, message to audience, and develop a story strategy to enhance the effect of training.

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LEARNING OBJECTIVES

- Identify the factors that make story an effective method of learning transfer in the health field.
Describe training design considerations that match the story to the desired impact.
- Develop a story strategy to enhance the effect of training.



Opening General Session and Social

Main Hall

Changing Needs in Education and Training: Evidence-Based Medicine

Harshad Sanghvi

JHPIEGO Corporation

Transfer of Learning: Maximizing Your Investments in Training

Rick Sullivan

Director

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Transfer of Learning:
Maximizing Your
Investments in Training



JHPIEGO

Rick Sullivan

Welcome

- Welcome to the **Training in Africa** Conference
- Welcome to the **Transfer of Learning** Workshop
- Introductions:
 - Pairs
 - Name/position
 - Unique characteristic

Workshop Objectives

- Describe transfer of learning and **why it is important**
- Discuss factors that affect **transfer and learner performance**
- Describe key strategies that can **be used before, during and after training**
- Discuss issues related to **monitoring and evaluating learning transfer**

Why do we do training?

- To ensure workers have the knowledge and skills to do the job.

What is Transfer of Learning?

- ...ensuring that the knowledge and skills acquired during a learning intervention are applied on the job...

Brainstorming

- Why training doesn't transfer?
 - 4 groups
 - identify reasons
 - Share with the large group

Why focus on transfer?

- Improves quality of client services
- Protects training investments
- Encourages and empowers learners
- Improves accountability for **implementation**
- Enhances likelihood that **interventions will target specific needs**
- Helps supervisors keep current

What are the barriers to transfer?

- Lack of reinforcement on the job
- Difficulties in the work environment
- Non-supportive organizational culture
- Learners' perception that new skills are **impractical**
- Learners' discomfort with change
- Separation from the instructional **source**
- Poor instructional design and delivery
- Negative peer pressure

Other barriers?

- Can you think of **other barriers to transferring learning?**

Activity

- Are you ready for an activity?
- You need a pencil or pen and one of the post-it notes on your table.
- Let's go . . .

What is my greatest performance block?

I would perform better if I . . .

1. Knew exactly what was expected of me.
2. Received regular feedback about how I was doing, compared to what was expected.
3. Had the right tools to do my job and a work environment that suited my job.
4. Had some incentives to excel (e.g., recognition).
5. Had better skills and knowledge about how to do my job.
6. Had a supportive supervisor or manager.

Performance Factors Matrix

1. Expectations	2. Feedback	3. Tools
4. Incentives	5. Skills & Knowledge	6. Organizational Support

Adapted from Stolovitch and Keeps 1999.

What performance factors affect TOL?

- Job expectations
- Performance feedback
- Physical environment and tools
- Motivation
- Skills and knowledge
- Organizational support

What is the TOL process?

...an interrelated series of tasks performed by supervisors, trainers, learners and co-workers before, during and after a learning intervention in order to maximize transfer of knowledge and skills and to improve job performance...

The TOL Matrix

- Turn to Page 9 in the TOL Guide.
- Let's take a look at the TOL matrix.
- Rick – go to the next slide ...



The Transfer of Learning Matrix

	Before Learning	During Learning	After Learning
Supervisors			
Trainers			
Learners			
Co-workers			

43 suggested strategies

What is an action plan?

- Before we look at the TOL strategies, let's talk about action plans.
- Turn to Page 11 in your TOL Guide.

Action Plan

- Describes steps to maximize transfer of learning
- Used by learner, supervisor, trainer and co-workers
- Helps track expectations, commitments and resources
- Initiated before training, refined during training and implemented after training

Action Plan Key Elements

Action Plan				
Specific Areas to Improve:				
Problems to Overcome:				
Detailed Steps	Responsible Persons	Resources	Date Time	Changes Expected
Commitment of Support Team:				

Activity

- Let's look at the TOL strategies:
 - 4 groups (supervisor, trainer, learner, co-workers)
 - Analyze strategies
 - Summarize and share

Key Strategies

- Before Learning
- Ensure problem can be "fixed" **with training**
 - Select the "right" trainees
 - Establish agreements about **intervention** goals

Key Strategies (continued)

- **Before Learning** *(continued)*
- **Design the “learner support system”**
 - learning materials
 - interactive activities
 - facilitators/peers
 - administrative support

Key Strategies (continued)

- **During Learning**
 - **Match training activities to intervention goals**
 - **Give learners the time to learn**

Activity

- **Let's identify some activities the trainer can use to increase transfer**
 - 4 groups
 - Identify strategies
 - Share

Key Strategies (continued)

After Learning

- Provide ongoing support and resources
- Monitor learner progress
- Make adjustments as needed

Brainstorming and Discussion

- What are the challenges faced in **planning** and conducting visits after learning?
- Let's identify some of the **challenges** and then talk about how to address **them**.

Measuring the Effectiveness of Learning Interventions

- Performance on the job
- Success of approach
- Appropriateness of the materials and resources

Summary

- **Transfer of learning is important in maximizing the effect of training**
- **There are a number of factors that affect transfer and learner performance**
- **There are key strategies that you can use before, during and after training**
- **Monitor and evaluate learning transfer to document that transfer has occurred**

Question and Answer

- **What questions do you have about:**
 - Transfer of learning
 - The TOL Guide
 - How to apply the TOL process
- **Thanks for coming – and please complete the evaluation form.**
- **Have a great conference!!**

Evaluating Performance and the Effect of Training

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Evaluating Training
and Performance



JHPIEGO

Kama Garrison, MPH

Warm-up

Instructions: Come up with an **indicator** and place the cards under the appropriate heading

- Inputs
- Processes
- Outputs
- Outcomes (Effects and Impact)

2

What is Training Evaluation?

- A collection, synthesis, and interpretation of data to determine whether **training has** improved the performance of a **worker**

3

Purposes of Training Evaluation

- To determine which aspects of the training worked or didn't work (e.g. Curriculum, Trainers, Venues, Delivery)
- Provide information to management staff for design of future trainings
- Document/demonstrate the effectiveness of the training to stakeholders
- Justify budgets for training

Levels of Training Evaluation

- Level 1 Participant Reaction (during and at the end of the course)
- Level 2 Participant Learning (during and at the end of the course)
- Level 3 On-the-job Performance (after the course)
- Level 4 Outcome of Training (after the course)

Source: Kirkpatrick, 1959

Level 1: Reaction (During and at the End of the Course)

- How participants like the course and how they perceive its value
- Methods
 - Daily participant feedback (oral or written)
 - Daily trainers' meetings
 - Session/trainer evaluations
 - End-of-course surveys
 - End-of-course informal discussions

Why Level 1 Evaluations?

- Determine whether or not training is considered worthwhile
- Identify potentially serious problems in training design
- Provides the participant with an opportunity to express her/his reactions to the course organizers.

7

Daily Feedback

- Encourages participants to think and talk about what was learned and to make suggestions
- One technique is to
 - Have participants (individually or in groups) write 2-3 important ideas or concepts they learned during the day, as well as suggestions for course improvement.
 - Then share with the group one or two items from those they identified.

8

Daily Trainer Meetings

- If 2 or more trainers are conducting the course, it is important that they meet briefly each day to discuss the participants' evaluations, as well as each trainer's assessment of the training
- By doing this, trainers may identify elements of the training that need to be modified

9

Session/Trainer Evaluations

- May be given forms to provide feedback for each session and/or speaker
- The results of these evaluations can provide a basis for determining whether sessions need to be modified or whether a trainer's clinical or training skills need improvement

10

End-of-Course Surveys

- Extent to which the course met expectations
- Aspects of the course that were most/least helpful
- *Relevance of the course content to participants' work*
- Appropriateness of the training methods
- Extent to which administrative aspects of the course were satisfactory (training environment, accommodations, travel arrangements, etc.)

11

End-of-Course Informal Discussions

- Informal participant and trainer discussions should accompany the more formal questionnaire-based survey so that the trainer can better understand the survey responses

12

Question or Activity

- Identify a potential course or workshop you might teach
- Which approaches would you use?
- What questions would you ask?

13

Level 2: Participant Learning

- Understanding of principles and facts; demonstration of skills and techniques and the ability to apply them
- Methods:
 - Knowledge-based assessments (e.g., pre- and midcourse questionnaires)
 - Competency-based skill assessments (e.g., checklist)

14

Why Level 2 Evaluations?

- Determine whether or not the participant has acquired the necessary knowledge
- Determine the participants level of competency in the new skills

15

Level 2 Evaluations

- Learning throughout the course is measured by:
 - Initial assessment of each participant's and the group's general knowledge of and skills in the course topic
 - Continual assessment of each participant's mastery of the knowledge and skills defined in the course objectives

16

Several Points about Level 2 Evaluations

- It is at this point that the trainer determines *whether the participants have mastered* the knowledge and skills required to deliver a quality service.
- Participants who are judged not to be qualified should be identified for followup skills reinforcement or retraining.

17

Level 3: On-the-job Performance (after the course)

How effective has training been in improving the job performance of those completing training?

- **Is the individual able to competently perform the tasks s/he was trained in the course to do?**
- **Has the individual been given an opportunity to practice the new tasks?**
- **Do supervisors, managers and/or those who received training feel that the course made a difference in the quality of their work?**
- **Did training solve the problem or fill the service provision need identified during the needs assessment process?**

Area of Focus: On-the-Job Performance

- WHY: application of the learned **skills in the** work setting
- WHAT: content of training
- WHO: those who were trained
- WHERE: at the worksite
- HOW: appropriate methods and **sample** selection

WHY: application of skills in the work setting

- Effectiveness of training
- Change in provider practices (behavior performance)

WHAT: content of training

- Use of skills acquired during **training**
- Retention of knowledge during **training**
- Appropriate attitudes towards the **skills** learned
- Non-training reasons why content **not used**

WHO: those who were trained

- All or a sample of those who received training
- Including a control group -?

WHERE: at their worksite

- Provider-client interactions
- Skills simulations (anatomic models, role plays)
- Interviews with clients, providers and supervisors

23

WHEN: 3-6 months after training

- Sufficient opportunity to apply the new knowledge and skills on the job
- HOWEVER, need to plan for this *during the training*
 - Purpose and content discussed with participants
 - Include supervisors and senior managers in discussions (if not held prior to implementing the training)

Level 4: Impact of Training

Training improved service delivery quality

Example indicators suggesting a **positive** outcome of training on RH/FP services:

- Increased # service sites (**with a trained provider**) offering an **expanded** range of FP **methods**
- Increased # service sites (**with a trained provider**) offering an **expanded** range of RH **services**
- Increased # FP users at **service sites with trained providers**
- Higher FP **continuation rates at such sites**
- Increased client **satisfaction with RH/FP services** at such sites
- [Could go as far as CPR, TFR, HIV rates]

How do you get this information?

- What statistics and documents/records are useful and how?
- What information would you collect to compare these sites with others?
- What are common applied research options used in many developing countries that would provide some of this information and what are their limitations?
- What kinds of "passive" analyses can be done to demonstrate the outcome (**impact**) of training?

Effect of Training on Service Delivery:

- **Facility level:**
 - Access to a service delivery point (SDP)
 - Use of SDP services
 - How an SDP is functioning
- **Provider level:**
 - Provider performance (i.e., individual performance after training)
 - Effectiveness of curriculum and/or training implementation

HOW?

Post-training period:

- Use all data collected in Level 1 and 2 evaluation.
- In addition you can evaluate:
 - Knowledge retention after training
 - Retention of skill competency
 - Extent of the new skills being applied to the job
 - Barriers preventing skills application

HOW?*(continued)*

- **Site Visit Observations:**
 - Are individuals using the skills taught during the course?
 - Do they still retain those skills (if difficult to observe, simulation)
- **Interviews with Those Who Completed Training:**
 - Was the training useful and the acquired skills be applied after training?
 - Is the individual applying the skills acquired?
 - What constraints limit the ability to apply skills acquired?
 - What potential for a positive outcome on RHFP services?
- **Data from the Supervisor:** Feedback about training effectiveness

HOW?*(continued)*

Sampling:

- Do the findings need to be generalizable?
If yes, random sample approach
- How large is the target population from which the sample would be drawn?

Conceptualizing

- What is the key question to be answered **and who is the audience?**
- Planning
 - What preparations are necessary **and who will do them?**
- Implementing Data Collection:
 - How will data be collected **and by whom?**
- Data Analysis/Synthesis
 - Who is responsible for analysis **and on what timeline?**
- Report-Writing
 - Who is responsible for preparing **the report and who needs to review it?**

Organizing an Assessment: Things Often Forgotten

- Confidentiality and consent (**put on observation/interview instrument as a check-box**)
- Standard ID info/**unique identifier for tracking**
- Logistical planning (**notifying the clinics of your visit, transportation etc**)
- Adequate training time for **evaluation team**
- Estimating times for **data collection activities**
- Supplies: **printer, paper, cartridges, transparencies**

Heading off problems before they occur

- Language problems
- Team-member consistency
- Keeping morale/effort high
- Problem situations:
 - No permission from **hospital administrator, no clients, trainee absent**
- Weather
- Unexpected holiday strike
- No electricity **other supplies**

Training vs. Performance

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Training vs. Performance

<p>TRAINING</p> <p>Training provides workers the knowledge and skills they need to perform their jobs effectively.</p>	<p>PERFORMANCE</p> <p>Performance is the work tasks (behavior/activities) that a person does and the results thereof.</p>
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Adapted from ASID's website
www.asid.org

Training Evaluation vs. Performance Evaluation

<p>Training</p> <ul style="list-style-type: none"> • Ability to perform skills acquired during training on-the-job • Retention of knowledge during/after training • Appropriate attitudes towards the skills learned • Effectiveness of learning approach 	<p>Performance</p> <p><u>Individual</u></p> <ul style="list-style-type: none"> • Ability to apply skills and knowledge acquired during training on the job, to produce [desired] results <p><u>Organization</u></p> <ul style="list-style-type: none"> • Ability of organization to support newly acquired skills and knowledge • Effectiveness of overall goals and objectives to the organization
--	---

Example of Instruments (In packet or websites)

- MEASURE Evaluation's QIQ: Observation Checklist for Clinic-based Family Planning Services (http://www.npc.unc.edu/measure/publications/manuals/qiq_user.pdf)
- PRIME's Observation Checklist for FP (packet)
- JHPIEGO's Technical Reports (http://www.jhpiego.org/scripts/pub/category_detail.asp?category_id=5)
- FHI's Provider Checklists for Reproductive Health Services (<http://www.fhi.org/en/fp/checklistse/chklistfpe/englishchecklists.pdf>)
- Population Council's 1999 Ghana Situation Analysis Study (Africa OR/TA Project) - (packet)

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Facility-based Tool (from MEASURE Evaluation's QIQ)

TABLE OF QIQ INDICATORS

Indicator Number	Indicator	Clinic Site	Observation Facility Audit
1-1	Provider		
1-1a	Does not allow smoking and drinking	X	
1-1b	Does not allow gambling	X	
1-1c	Does not allow prostitution	X	
1-1d	Does not allow sex workers	X	
1-1e	Does not allow drug use	X	
1-1f	Does not allow alcohol use	X	
1-1g	Does not allow tobacco use	X	
1-1h	Does not allow gambling	X	
1-1i	Does not allow sex workers	X	
1-1j	Does not allow drug use	X	
1-1k	Does not allow alcohol use	X	
1-1l	Does not allow tobacco use	X	
1-1m	Does not allow gambling	X	
1-1n	Does not allow sex workers	X	
1-1o	Does not allow drug use	X	
1-1p	Does not allow alcohol use	X	
1-1q	Does not allow tobacco use	X	
1-1r	Does not allow gambling	X	
1-1s	Does not allow sex workers	X	
1-1t	Does not allow drug use	X	
1-1u	Does not allow alcohol use	X	
1-1v	Does not allow tobacco use	X	
1-1w	Does not allow gambling	X	
1-1x	Does not allow sex workers	X	
1-1y	Does not allow drug use	X	
1-1z	Does not allow alcohol use	X	
1-2	Does not allow tobacco use	X	
1-3	Does not allow gambling	X	
1-4	Does not allow sex workers	X	
1-5	Does not allow drug use	X	
1-6	Does not allow alcohol use	X	
1-7	Does not allow tobacco use	X	
1-8	Does not allow gambling	X	
1-9	Does not allow sex workers	X	
1-10	Does not allow drug use	X	
1-11	Does not allow alcohol use	X	
1-12	Does not allow tobacco use	X	
1-13	Does not allow gambling	X	
1-14	Does not allow sex workers	X	
1-15	Does not allow drug use	X	
1-16	Does not allow alcohol use	X	
1-17	Does not allow tobacco use	X	
1-18	Does not allow gambling	X	
1-19	Does not allow sex workers	X	
1-20	Does not allow drug use	X	
1-21	Does not allow alcohol use	X	
1-22	Does not allow tobacco use	X	
1-23	Does not allow gambling	X	
1-24	Does not allow sex workers	X	
1-25	Does not allow drug use	X	
1-26	Does not allow alcohol use	X	
1-27	Does not allow tobacco use	X	
1-28	Does not allow gambling	X	
1-29	Does not allow sex workers	X	
1-30	Does not allow drug use	X	
1-31	Does not allow alcohol use	X	
1-32	Does not allow tobacco use	X	
1-33	Does not allow gambling	X	
1-34	Does not allow sex workers	X	
1-35	Does not allow drug use	X	
1-36	Does not allow alcohol use	X	
1-37	Does not allow tobacco use	X	
1-38	Does not allow gambling	X	
1-39	Does not allow sex workers	X	
1-40	Does not allow drug use	X	
1-41	Does not allow alcohol use	X	
1-42	Does not allow tobacco use	X	
1-43	Does not allow gambling	X	
1-44	Does not allow sex workers	X	
1-45	Does not allow drug use	X	
1-46	Does not allow alcohol use	X	
1-47	Does not allow tobacco use	X	
1-48	Does not allow gambling	X	
1-49	Does not allow sex workers	X	
1-50	Does not allow drug use	X	
1-51	Does not allow alcohol use	X	
1-52	Does not allow tobacco use	X	
1-53	Does not allow gambling	X	
1-54	Does not allow sex workers	X	
1-55	Does not allow drug use	X	
1-56	Does not allow alcohol use	X	
1-57	Does not allow tobacco use	X	
1-58	Does not allow gambling	X	
1-59	Does not allow sex workers	X	
1-60	Does not allow drug use	X	
1-61	Does not allow alcohol use	X	
1-62	Does not allow tobacco use	X	
1-63	Does not allow gambling	X	
1-64	Does not allow sex workers	X	
1-65	Does not allow drug use	X	
1-66	Does not allow alcohol use	X	
1-67	Does not allow tobacco use	X	
1-68	Does not allow gambling	X	
1-69	Does not allow sex workers	X	
1-70	Does not allow drug use	X	
1-71	Does not allow alcohol use	X	
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1-76	Does not allow alcohol use	X	
1-77	Does not allow tobacco use	X	
1-78	Does not allow gambling	X	
1-79	Does not allow sex workers	X	
1-80	Does not allow drug use	X	
1-81	Does not allow alcohol use	X	
1-82	Does not allow tobacco use	X	
1-83	Does not allow gambling	X	
1-84	Does not allow sex workers	X	
1-85	Does not allow drug use	X	
1-86	Does not allow alcohol use	X	
1-87	Does not allow tobacco use	X	
1-88	Does not allow gambling	X	
1-89	Does not allow sex workers	X	
1-90	Does not allow drug use	X	
1-91	Does not allow alcohol use	X	
1-92	Does not allow tobacco use	X	
1-93	Does not allow gambling	X	
1-94	Does not allow sex workers	X	
1-95	Does not allow drug use	X	
1-96	Does not allow alcohol use	X	
1-97	Does not allow tobacco use	X	
1-98	Does not allow gambling	X	
1-99	Does not allow sex workers	X	
1-100	Does not allow drug use	X	

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Welcome break!

15 minutes

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Some Common Facility-based Evaluation Designs

(from Fisher et al. 1991)

- Pre-post intervention single group ($O_1, X O_2$)
- Pre-post intervention non-equivalent control group
 $O_1, X O_2$
 $O_3, (Y) O_4$
- Post intervention-only control group
 $X O_1$
 $(Y) O_2$
- Time series ($O_1, O_2, O_3, X O_4, O_5, O_6$)
- Cross sectional (one point in time)
- Qualitative (e.g. Focus Groups, in-depth interviews)

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Case Studies

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Practicum

- **Purpose:** Use of a computer and statistical package to examine data, create an index of Performance, compare before and after performance and analyze apparent differences.
- **Method:** Presentation followed by hands-on replication and use of the data.
- **Dataset:** Variables representing items from FPI-CPI gathered through observation in County X. Before-after training.
- **Process:** Sum of items into index of performance. Repeat procedure for pre-post. Eye inspection and comparison through t-test.
- **Interpretation and uses:** Individual and firm analysis vs. composite scores. Use of results for strengthening training and provider support.

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Learning With Technology

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*Best Practices in
Training in Africa*

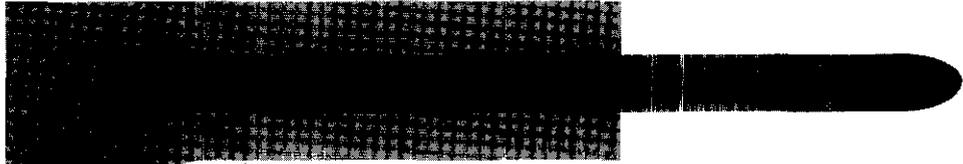
Technology Cafe

5 May 2003

Learn about the CD-ROM and Internet
resources available for training

Hands-on practice with CD-ROMs





CD-ROM Resources

COMPUTER-BASED COURSES

HIV ReproLearn® Tutorials – Series of multimedia tutorials on *Care of Women with HIV Living in Limited-Resource Settings*. Narrated by international experts, tutorials include audio narration, presentation graphics, links to related articles, and a self-grading quiz. Topics include Prevention, VCT, Reproductive Health, Pregnancy, Breastfeeding, Nutrition, Antiretrovirals, Tuberculosis and Infection Prevention. Can be used for self-study or group training. Also available on the ReproLine web site at www.reproline.jhu.edu (JHPIEGO)

Infection Prevention Multimedia Course – A course designed to help healthcare providers, supervisors of healthcare facilities, medical students, and nursing students strengthen infection prevention practices in low-resource settings. Topics include disease transmission, handwashing, instrument processing, waste disposal, and more. Designed for self-study or group training. Available in Spanish and English. Also available on the EngenderHealth web site at www.engenderhealth.org. (EngenderHealth)

ModCal® for IUD Services – Interactive multimedia format to provide information on how to provide IUD services including counseling, insertion and removal of the Copper T 380A IUD and managing side effects. Designed to be guided by a clinical facilitator and integrated with skills practice. (JHPIEGO)

ModCal® for Clinical Training Skills – Helps service providers become more effective preservice faculty or inservice trainers. Candidate clinical trainers first complete the ModCal instruction and then practice newly acquired skills under the guidance of an advanced or master trainer. (JHPIEGO)

Reproductive Health Minicourses – Designed to give providers of reproductive health services a basic introduction to a range of topics that will help them better assess clients needs, be more sensitive to the issues that underlie clients risks and decisions, and promote awareness of what it means to be “reproductively healthy.” Topics include *Sexuality and Sexual Health, Sexually Transmitted Infections, HIV and AIDS*. Designed for self-study or group training. Also available on the EngenderHealth web site at www.engenderhealth.org. (EngenderHealth)

TRAINING TOOLS

Compendium of Best Practices – A database of best practices that is part of a larger strategic framework to improve program performance. It is organized to facilitate strategic decision-making about which practices would most contribute to improving program performance in a particular country. (Advance Africa)

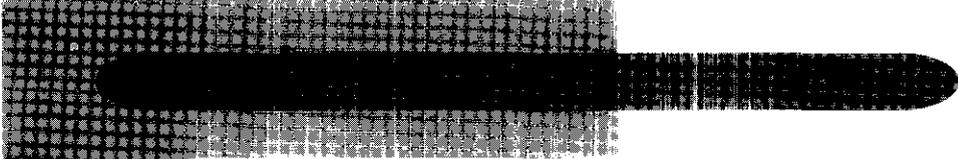
Implementing Best Practices (IBP) ToolKit – A CD-based toolkit designed to inform policy makers, programme managers, clinicians and staff working in reproductive health about the materials and resources that are produced by WHO, USAID, UNAIDS and the partner agencies in the IBP Consortium. The toolkit consists of a bibliography that includes title entries as well as abstracts and contact information on how to obtain the material. (FHI/WHO)

Maximizing Access and Quality (MAQ) Exchange Materials – A USAID initiative to improve access to and quality of health services for clients and programs. MAQ promotes good-quality services and also works to remove unnecessary barriers that discourage clients from using services. The CD includes a collection of PowerPoint presentations for use in sensitizing staff at USAID missions and country governments. Additional materials are available at www.maqweb.org. (USAID/Cooperating Agencies)

Performance Improvement Stages, Steps and Tools – The PRIME II second edition interactive CD and web site 'Performance Improvement Stages, Steps and Tools' presents an easy-to-use guide for finding the root causes of performance problems and then selecting and implementing interventions to fix those deficits. The set of tools provided can be used independently or in conjunction with other interventions to improve the quality and accessibility of health care services. The tools are also available from www.prime2.org. (Intrah/PRIME II)

Research Ethics Training Curriculum – The Research Ethics Training Curriculum offers international researchers an overview of the research ethics field, eight reproductive health case studies, reference documents, and a computer-graded post-test. May be used for self-study or a four-hour group training. Available as a CD-ROM, a three ring binder, or on the FHI Web page in three languages (English, Spanish and French) (FHI)

Standard Days Method and CycleBeads – Two CD-ROMs have been developed to describe the Standard Days Method. One is a multimedia



CD-ROM Resources

tutorial that includes a narrated PowerPoint presentation linked with related materials. This tutorial describes the scientific basis of the Standard Days Method as well as the use of the CycleBeads. This tutorial is available in English and Spanish. The second CD-ROM is a video called "CycleBeads: An Easy Way to Use the Standard Days Method." More information is available on the CycleBeads web site at www.cyclebeads.com. (IRH/JHPIEGO)

Transfer of Learning: A Guide for Strengthening the Performance of Health Care Workers – A joint publication of PRIME II and JHPIEGO, Transfer of Learning uses a dynamic matrix to outline specific steps for supervisors, trainers, learners and co-workers to follow before, during and after a learning intervention to promote the transfer of learning. When health care workers participating in training are able to transfer their newly acquired knowledge and skills to their jobs, higher levels of performance and sustained improvements in service delivery are likely to result. PRIME II has created this interactive CD and a web site based on the Transfer of Learning. The guide is also available from www.prime2.org. (Intrah/PRIME II and JHPIEGO)

IEC MATERIALS

Media/Materials Clearinghouse

The Media/Materials Clearinghouse (M/MC) is an international resource for health professionals who seek samples of pamphlets, posters, videos, and many other media/materials designed to promote public health. Use a search engine to find family planning/reproductive health posters and other materials on just the topics and the countries you want. Also available on the JHU/CCP web site at www.jhuccp.org/mmc. (JHU/CCP)

REFERENCE MATERIALS

Client-Provider Communication CD-ROM

This CD-ROM highlights evidence-based best practices and recent innovations for improving the quality of client-provider communication. It offers *program managers, providers, technical experts, and researchers* a set of state-of-the-art approaches and tools for improving quality. The content is

organized into four programmatic focal areas: provider performance, client behaviors and community norms, service delivery management, and research and evaluation. While the majority of the examples come from family planning, they are applicable to other areas of health. Program descriptions and results demonstrate how the approaches and tools can be implemented as a package for greatest impact. Sample tools are included in their entirety, along with advice on how to adapt them to different settings. (JHU/CCP)

Involving Men in Sexual and Reproductive Health: An Orientation Guide

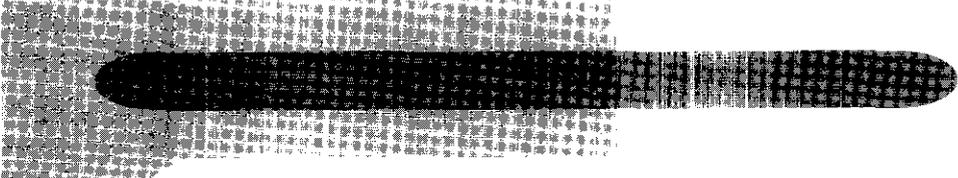
The Men and Reproductive Health Subcommittee of USAID's Interagency Gender Working Group (IGWG) created this CD, which has two overarching goals: promoting gender equity for its own sake, and using gender equitable approaches to improve sexual and reproductive health outcomes. Intended as a tool for program designers and planners, program managers and policymakers, as well as NGOs and community groups, the Guide can facilitate sharing information, aiding program design and planning, and advocating for improved sexual and reproductive health programs and services. (USAID)

International Family Planning Perspectives

IFPP is a peer-reviewed quarterly research journal that publishes articles on a wide variety of topics relating to family planning, reproductive health and population. The CD contains 10 years (1990-1999) of peer-reviewed articles and staff-written digests and updates. (JHU/CCP)

Manager's Electronic Resource Center (ERC)

The Manager's Electronic Resource Center (ERC) provides health managers around the world with access to the latest management tools, information, and resources. Popular ERC resources include *The Health Manager's Toolkit*, a compendium of field tested tools from many collaborating agencies; *The International Drug Price Indicator Guide*, which provides health professionals with current cost information about pharmaceutical products on the international market, and *The Guide to Managing for Quality*. The latter resource, developed collaboratively with UNICEF, offers users clear practical steps for implementing the quality improvement process, including a collection of concepts, tools, techniques, best practices, and experiences that can be adapted and used in different settings, or integrated to support existing quality improvement initiatives. Each section of this site contains research-based content, exercises and references. A complete collection of



CD-ROM Resources

the "The Manager," an award winning quarterly publication that presents in depth discussions of management strategies and case studies for improving health and family planning services (published in English, French, and Spanish), is included in the ERC. The ERC is also available on online (erc.msh.org) or through the MSH web site (www.msh.org). (MSH)

e-Population Reports – A valuable resource for planners, policy makers, researchers, educators, and program managers worldwide, this CD-ROM is a multi-media version of the Fall 2000 issue of Population Reports, "Population and Environment: The Global Challenge." The CD contains all the content of the print version, plus interactive enhancements that bring the topic to life and add depth and background. (JHU/CCP)

Reproductive Health Library – The RHL is the product of collaboration between the World Health Organization, Department of Reproductive Health and Research (RHR), the Cochrane Collaboration, and RHL partner institutions and scientists in developing countries. RHL is a user-friendly and affordable annual electronic review journal including systematic reviews from the Cochrane Collaboration, focusing on evidence-based solutions to reproductive health problems in developing countries. RHL is the main dissemination tool on evidence based practices within the WHO Programme. RHL disseminates 79 Cochrane Reviews, with corresponding new commentaries and practical recommendations. It also contains implementation aids and documents related to the implementation of specific evidence-based practices. RHL is published in English and Spanish and subscription is free to individuals in developing countries. (WHO)

Web Resources

USEFUL WEB SITES

CONDOMS (condoms.jhuccp.org)

The Condoms web site is an update and continuation of the Condoms CD-ROM, published in 1999 by POPLINE Digital Services. The Condoms CD-ROM is no longer available, but a new more up-to-date resource is now available on the Internet. The Condoms web site is a searchable reference

database containing images of print and promotional materials from the Media Materials Clearinghouse and many recent POPLINE abstracts and bibliographic records.

Directory of Hormonal Contraceptives (contraceptive.ippf.org/)

Online directory of hormonal contraceptives maintained by IPPF since 1988. Individuals providing hormonal contraceptives can use this directory to help them choose which contraceptives to order for their programmes and avoid ordering pills with the same composition under different brand names. It is also useful for health care and family planning providers to see which hormonal contraceptives are available in different countries around the world. The database can be searched by brand, composition, country, manufacturer, or type.

NetLinks (www.jhuccp.org/netlinks/)

NetLinks is a database of over 1,200 Internet resources useful to people working in health, population, and international development. Each entry includes a brief description and contact information, if available. (JHU CCP)

POPLINE (www.popline.org/)

The world's largest bibliographic database on population, family planning, and related health issues is available on the Internet. Citations with abstracts for over 295,000 records, representing published and unpublished literature, can be accessed free of charge. POPLINE is updated every two weeks with approximately 12,000 records added annually. Also available on CD-ROM. (JHU CCP)

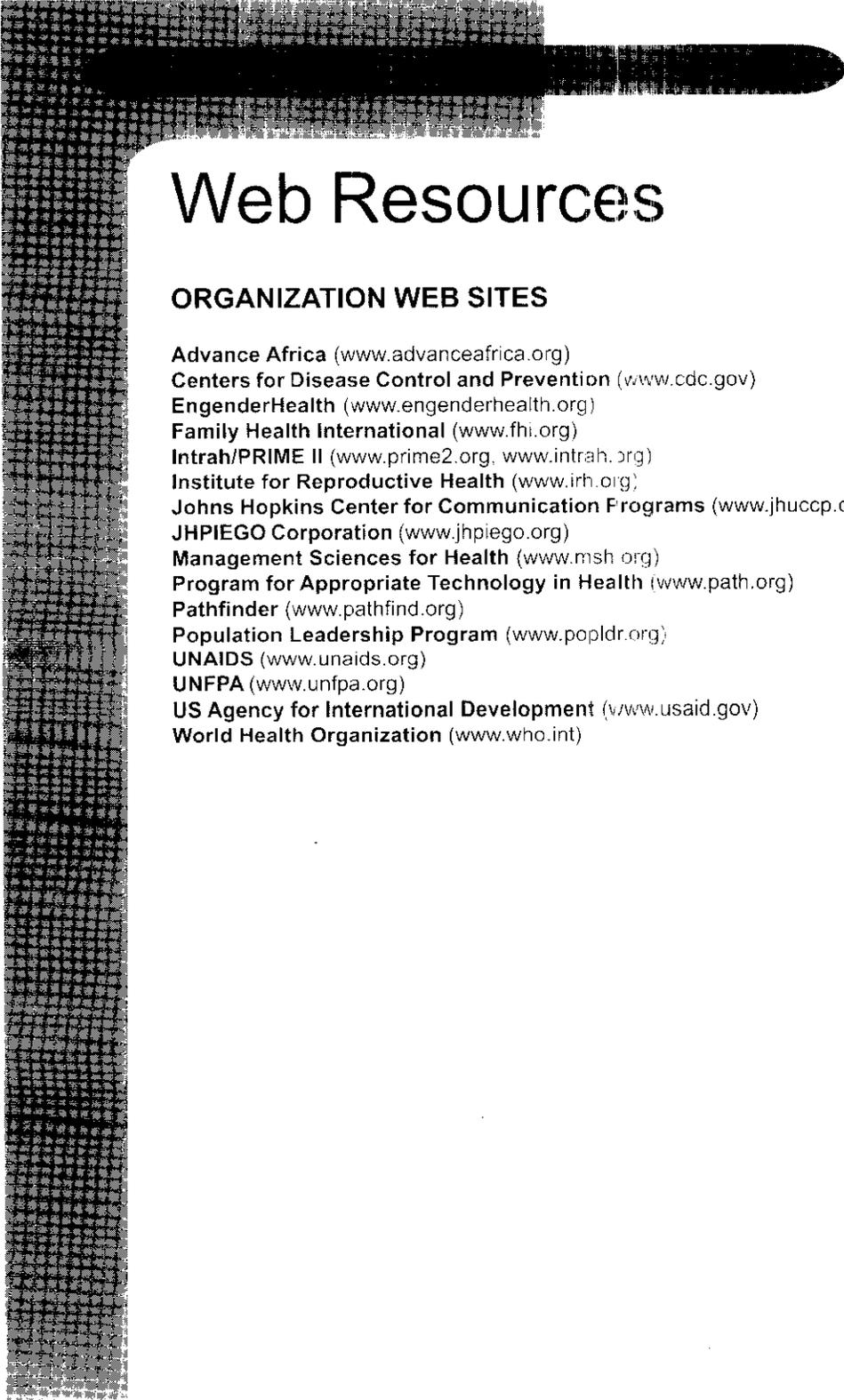
ReproLine® (www.reproline.jhu.edu/)

ReproLine is a reproductive health training web site offering up-to-date clinical information and tools for reproductive health trainers, including reference documents, presentation graphics, course checklists and syllabuses, sample role plays and case studies, and training articles. Also available on CD-ROM. (JHU CCP)

RH Gateway (www.rhgateway.org/)

RH Gateway is a collaborative search site for relevant, reliable reproductive health information. RH Gateway currently searches over 68 selected sites at once, answering your queries on reproductive health topics. (JHU CCP)





Web Resources

ORGANIZATION WEB SITES

Advance Africa (www.advanceafrica.org)
Centers for Disease Control and Prevention (www.cdc.gov)
EngenderHealth (www.engenderhealth.org)
Family Health International (www.fhi.org)
Intrah/PRIME II (www.prime2.org, www.intrah.org)
Institute for Reproductive Health (www.irh.org)
Johns Hopkins Center for Communication Programs (www.jhuccp.org)
JHPIEGO Corporation (www.jhpiego.org)
Management Sciences for Health (www.msh.org)
Program for Appropriate Technology in Health (www.path.org)
Pathfinder (www.pathfind.org)
Population Leadership Program (www.popldr.org)
UNAIDS (www.unaids.org)
UNFPA (www.unfpa.org)
US Agency for International Development (www.usaid.gov)
World Health Organization (www.who.int)

****Interactive** Reproductive Health
Training = Interesting and
Innovative Training**

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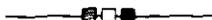
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**** INTERACTIVE ****
REPRODUCTIVE HEALTH
TRAINING
=
INTERESTING AND
INNOVATIVE TRAINING

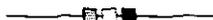
Training in Africa:
Best Practices, Lesson Learned, and Future Directions
May 2003



fha

Facilitators

- Maureen Kuyoh, FHI/Kenya
- Robert Rice, FHI/NC
- Jane Schueller, FHI/NC



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Objectives

By the end of this workshop, you will be able to:

- Explain why interactive training enhances participants' knowledge and skills
- Identify when it is important to include interactive exercises
- Describe the high and low energy spans for participants
- Develop utilize interactive training techniques to increase retention, build understanding, and improve skills



fha

Participant Expectations

- Participate, participate, participate!
- Creativity, open-mindedness, and innovation are key
- Facilitators will be resources
- No cell phones
- Begin and end on time
- Learn from each other
- Have fun!



Institute for Family Health

Workshop Agenda

- Why is *Interactive* So Important?
- Setting the Context
- How to Make Your Training More Interactive
- The Energy Cycle
- Selecting the Best Methods for Various Situations
- Cultural Sensitivity
- Training Health Providers
- References, Resources, and Web Sites



Institute for Family Health

Why is *Interactive* So Important?

- Participation in the learning process should be active, not passive
- Effective learning comes from shared experiences
- Successful learning includes feedback from the facilitator and other participants
- Maximum learning occurs when one is able to reflect, draw conclusions, and determine application



Institute for Family Health

Learning Styles

Visual 

Auditory 

Kinesthetic 

— ■ □ ■ —

fbh Institute for Family Health

How to Make Your Training More Interactive

Create a safe, positive, interactive learning environment through:

- Needs assessment
- *Comfortable physical setting*
- Structure and organization
- *Moderate level of content*
- High level of participation
- Minimal lecture
- Variety of methods
- Peer teaching
- Iterative process
- *Real-world application*

Source: Agency for Family Health, 1998

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Needs Assessment

Find out what participants think and feel about the training subject to assist with designing participatory activities:

- Pre-session surveys
- *Pre-test questionnaires*
- Phone calls
- On-the-spot assessments



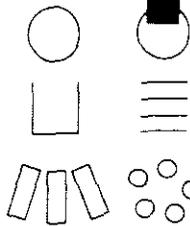
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fbh Institute for Family Health

Comfortable Physical Setting

Physically set-up room for:

- Participation
- Comfort
- Visibility



Classroom layout has a major influence on the success or failure of a training



Structure and Organization

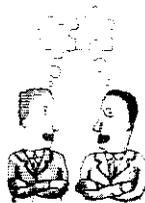
- Provide clear instructions, verbal and written
- Specify time limits
- Utilize flipcharts, transparencies, handouts, or slides
- *Creatively* divide participants into specific groups, when doing small group work
- Assign specific roles for exercises, when appropriate (recorder, timekeeper, spokesperson, flipchart writer)

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Moderate Level of Content

- Consider "need to know" versus "nice to know"
- Balance cognitive, affective, and behavioral domains of learning
- Clarify content and learning objectives
- Outline expectations of and for participants



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High Level of Participation

- Facilitate and manage the learning process
- Actively engage participants in the training from the start by:

- ⌘ Doing
- ⌘ Reflecting
- ⌘ Discussing
- ⌘ Applying



Institute for Family Health

Minimal Lecture

- Use lecture in small doses (10-15 minutes) to avoid confusion, boredom, and low retention
- Do not relegate participants to a passive role
- Utilize variations of the lecture



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Variety of Methods

Vary methods used to incorporate all elements of active learning

- Small group work
- Brainstorming
- Creative work
- Games
- Presentations
- Case studies
- Role-plays
- Simulations
- Demonstrations



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Peer Teaching

- Build on the wealth of expertise of participants
- Encourage participants to draw on and share their experiences with others
- Allow participants to answer each others' questions (not the facilitator!)



Source: *Journal of the National Association of Public Health Administrators*, 1994



Iterative Process

Use activities that build on and overlap concepts and skills learned to:

- Reinforce learning
- Provide more opportunities to digest and integrate

Source: *Journal of the National Association of Public Health Administrators*, 1994

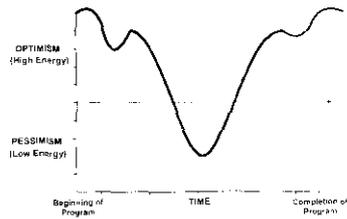


Real-world Application

- Solicit examples of hypothetical or real problems
- Relate new learning to participant's life situation
- Develop individual action plans for application in the workplace
- When possible, make field visits



The Energy Cycle



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Selecting the Best Methods for Various Situations

- Large-group Presentations
- Multiple-day and Shorter Training Interventions
- E-Learning and Distance Learning



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Large-group Presentations

- Multiple-choice lecture
- Mock interview
- Key words
- Fill-in-the-blank
- Graphic association
- Abbreviated lecture



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Multiple-day and Shorter Training Interventions

Increasing Knowledge (Concepts and Facts)

- Discussion
- Readings
- Lecture
- Handouts
- Field trips or tours
- Films, TV, or video-tapes



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Multiple-day and Shorter Training Interventions (contd.)

Improving Attitudes (Feelings and Opinions)

- Brainstorming
- Case studies
- Creative work
- Field trips
- Open-ended discussions
- Panel presentations
- Role-plays



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Multiple-day and Shorter Training Interventions (contd.)

Building Behavioral Skills

- Action plans
- Demonstrations
- Simulations
- Practicums
- Role-plays



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E-Learning and Distance Learning

- Web-based training
- Computer-based training
- Self-paced workbooks
- Audio-/video-tapes
- Audio-/video-conferencing



Source: Adapted from: *Web-based Training from the Academy of Health Care Executives*



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Cultural Sensitivity is Key

People are not homogeneous:

- Sex, age, race/ethnicity, socio-economic status, education, and religion
- Language, culture, traditions, and beliefs
- "Learning cultures"
- Health care practices
- Skill and knowledge levels
- Resource levels



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The Unique Needs of Health Providers

- Often most comfortable with lecture format
- Helpful to start participatory activities slowly, e.g., icebreakers
- Ease participants into role plays, simulations, and creative work
- Critical to build on participants' knowledge and skills



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fhi

www.fhi.org

Suggested Web Sites

- *Training Magazine*
www.trainingmag.com
- *The Training Journal*
www.trainingjournal.co.uk
- American Society for Training and Development
www.astd.org
- Langevin Learning Services
www.langevin.com

fhi

www.fhi.org

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**Strengthening Preservice Education
Made “Easier”:
Applying a Four-Phased Process**

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THE PRESERVICE STRENGTHENING PROCESS

Lois A. Schaefer, Senior Training Advisor, JHPIEGO

Why Preservice Curriculum Strengthening is Necessary

The design and development of a **preservice curriculum**¹ is a time consuming and challenging process. Once in place, therefore, it is **generally** used for many years without major modifications. There are, however, **three situations** that can lead to the review and strengthening of portions of a preservice curriculum on a **more frequent** basis:

- Introducing a new healthcare **practice or strategy**, such as postabortion care (PAC), the national HIV/AIDS strategy, or new **family planning** methods
- Updating existing technical information and service delivery practices (e.g., the shift to refocused antenatal care in maternal and neonatal health programs)
- Addressing the recognition that **new healthcare professionals** do not have the basic knowledge and skills needed to **be competent** providers upon completion of their basic education

To adequately respond to one or a **combination** of these situations, it usually is not necessary to restructure the entire curriculum. **Instead, the process** of reviewing and strengthening focuses on those technical areas to be added or those **identified** as weak, and modifications are made within the existing relevant portions of the curriculum. This is the process that will be described in this session.

Components of the Preservice Education System

Efforts to strengthen preservice education frequently focus on the teaching institutions responsible for its implementation. **Although these** institutions play a critical role, there are other factors and stakeholders that influence **preservice** education that must be recognized and addressed if strengthening efforts are to **be effective**. These include:

- **Entrance requirements.** Generally **set by the** Ministry of Education and or Health, these requirements determine the **background that** students bring to their preservice experience, which, in turn, influences the **educational objectives** that can be achieved.
- **Service delivery sites.** Students will **develop** their skills most fully while in the clinical practice sites. These sites, which **are under the** direction of the Ministry of Health, must provide adequate opportunities for **practice that** is consistent with what is being learned in the classroom.
- **Graduation requirements.** What **students must** achieve in order to successfully graduate from the preservice system is **established by the** Ministry of Education and or Health, often

¹ Preservice curriculum is defined as all the courses of study offered by an educational institution (e.g., medical school curriculum, nursing school curriculum)

with input from professional associations and licensing bodies. The requirements should reflect the roles and responsibilities students will be expected to fulfill when they become healthcare providers.

- **Licensing requirements.** National councils or associations, responsible for promoting and guiding a specific profession such as nurses or midwives, determine what is required for licensure after graduation and maintaining that licensure over time. They may work with the Ministry of Health in establishing these standards.
- **Deployment policies.** How new graduates are used within the healthcare system – the location and type of facility to which they are assigned, the role they fill there, and the length of service in that position – is generally determined by the Ministry of Health and based upon the most urgent needs of the healthcare system. In many instances, the resulting assignments may not be the most appropriate for someone who has just completed her/his basic education.
- There are additional policies and practices that are unique to each educational system that will influence the quality of preservice education, for example, policies that influence the ability of classroom teachers to maintain their clinical skills.

All of these factors and stakeholders have a role in determining what content is included in preservice curricula, how it is taught, and the importance or emphasis that is given to it. Consequently, to implement sustainable improvement in preservice education, **all** these elements must be taken into consideration. Change in any one area can have considerable impact on other areas, in both positive and negative ways. The challenge is to identify what is needed to maximize positive effects and avoid those that are negative. Addressing only one factor or including only some of the stakeholders may result in temporary improvements, but often the impact is not sustainable.

The **advocacy and policy issues** identified above require considerable time and effort to address and change successfully. Therefore, understanding the current situation within an existing preservice system is vital to beginning the strengthening process, but having effected change in these areas is not. Opening a discussion of the policy issues and initiating an ongoing effort to influence them, **concurrent** with the curriculum strengthening process, is often the best approach. As that process progresses, it highlights weaknesses in policies and related areas, thereby promoting change. Even after the curriculum strengthening is completed, advocacy and policy issues may require ongoing interventions. Key areas for intervention include:

- Accreditation of preservice education institutions
- Accreditation of service delivery sites (particularly the clinical training sites)
- Licensure of healthcare graduates
- Deployment of new graduates
- Certification or re-licensure of healthcare professionals (e.g., continuing medical education)
- Development of comprehensive workforce development plans that coordinate the needs of practicing providers (inservice training) and students completing their education (preservice education).

Working with stakeholders to strengthen these areas will help to create a quality continuum – from new graduate with up-to-date knowledge and skills and a license to provide services at an accredited healthcare delivery site, to the practicing provider participating in continuing

education not only to maintain a license, but to improve knowledge and skills in order to continue providing quality services.

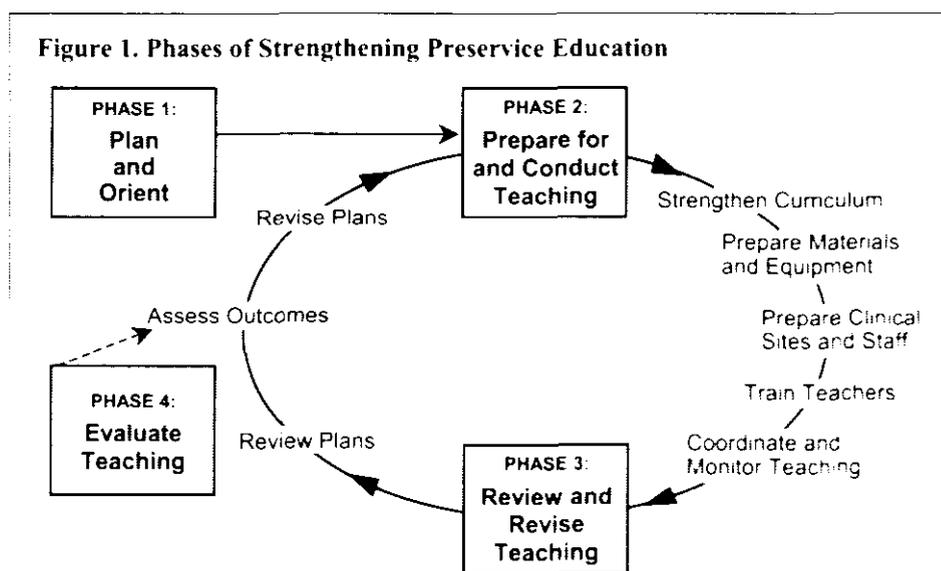
An Overview of the Curriculum Strengthening Process

There is one area, however, that needs to be effectively addressed **before** beginning the curriculum strengthening, if that process is to be successful. Before a country or program begins the process of strengthening preservice education, experience has shown that it is crucial to:

- Review the existing policy and service delivery guidelines that are relevant to the new or updated information to be introduced both for technical content and for job responsibilities of each cadre of healthcare provider
- Ensure that the guidelines are consistent with international standards (updating and revising the guidelines, if necessary) because they will serve as the basis for the strengthened technical content
- Gain familiarity and experience with the guidelines (by orienting existing healthcare providers to them or implementing them in model clinical sites, for example)

Strengthening policy and service delivery guidelines requires considerable time and effort. Once completed, however, the policies and guidelines that result provide the basis for up-to-date and standardized teaching and service delivery practices that are essential to improving the quality of preservice education. With policies and service delivery guidelines in place, the process of strengthening preservice education can be carried out in four phases.

The phases incorporate a cyclical process that can be used to gradually and continually strengthen content and teaching methods over time (see **Figure 1**).



Adapted from: World Health Organization (WHO). 2001. *Integrated Management of Childhood Illness (IMCI): Planning, Implementing and Evaluating Pre-Service Training* (working draft).

In each of the first three phases, there are tasks and activities that should be accomplished at the national level, at the level of the teaching institution or jointly by both levels. Tasks at the national level aim to create a favorable political environment by achieving consensus among key stakeholders. National-level tasks also support teaching institutions to prepare, implement, and evaluate teaching through the development of a national plan, provision of resources, and assistance with monitoring and implementation. Tasks at the level of the teaching institution aim to create a positive environment for implementing strengthened curricula by orienting opinion leaders and decision-makers; planning for the introduction of new teaching; preparing teaching staff, materials and clinical practice sites; coordinating teaching among different departments and courses; and monitoring, reviewing, and revising content and teaching methodology.

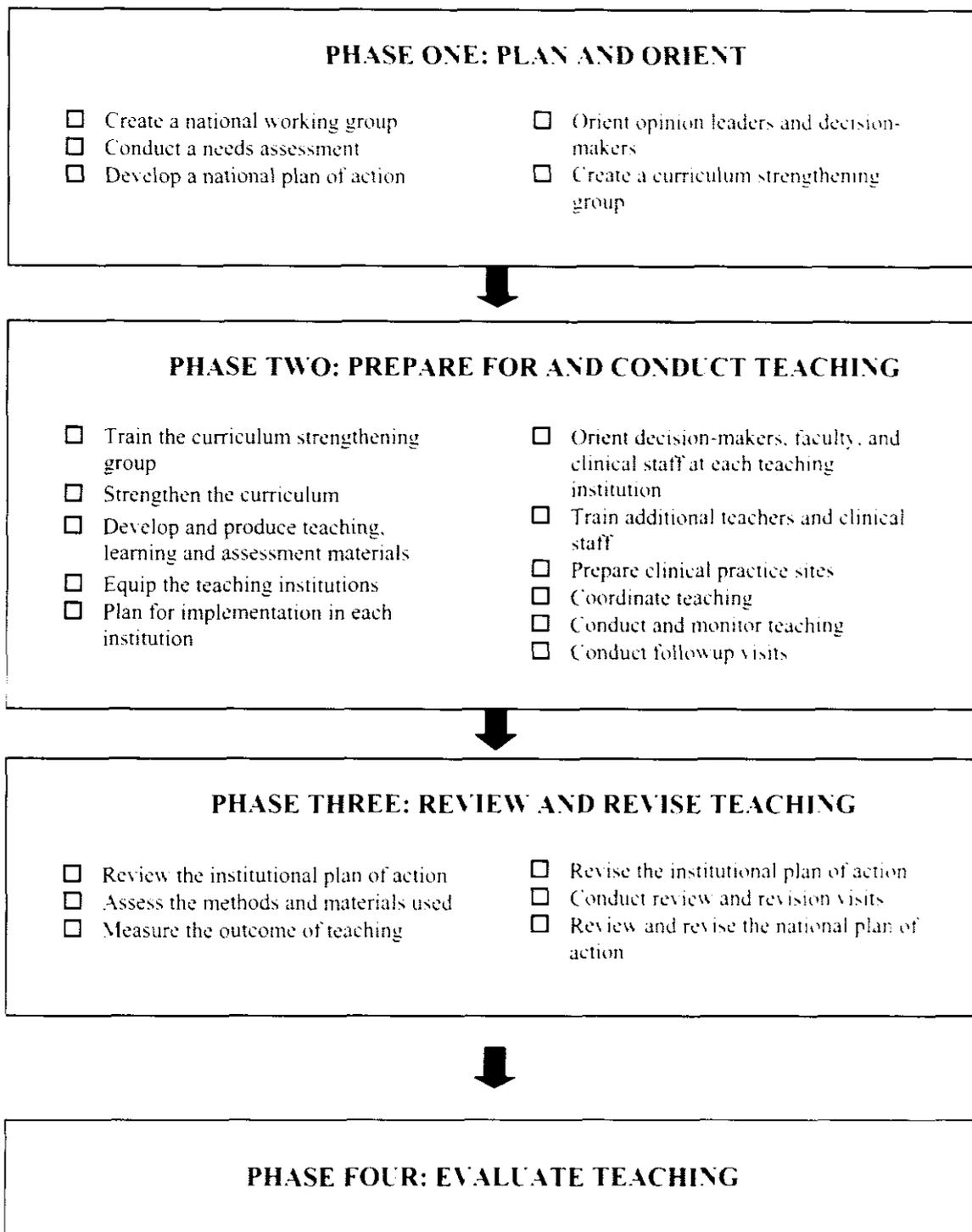
It is important to note that not all the identified tasks and activities have to be completed, or completed in the order given. The national groups and teaching institutions should **select appropriate tasks and activities** in accordance with the circumstances, needs, and resources available in their country, and complete them in a sequence that is most appropriate to their situation. It may be found that:

- Certain tasks or activities may be **omitted**. For example, in a country with only one medical school, national authorities may choose not to develop a national plan of action for introducing new/updated content into the school, but instead will work directly with the school.
- Some tasks or activities may need to be **repeated**. The national working group may conduct several orientation workshops, for example, each for a different type of audience. Or it may be necessary to conduct the same training course several times in order to reach all the faculty and clinical staff who must be trained.
- Other tasks may be **combined** or carried out informally. A short orientation meeting may be combined with the creation of a national working group, for example.

Some tasks, however, such as ensuring the support of key stakeholders or decision-makers at the national and institutional levels, or training teachers and clinical staff, **must not be omitted**. It is recommended that national groups and teaching institutions carefully select tasks and activities that suit their situation and are based on identified needs and available resources.

Suggested phases and tasks are summarized in **Figure 2**.

Figure 2. Phases and Tasks in the Curriculum Strengthening Process



Phase One – Plan And Orient

Before changes can be made to academic programs, the rationale for introducing new or updated content into nursing, midwifery and medical education must be well understood and accepted by key persons both inside and outside the teaching institutions. Once the benefits and consequences of the needed change are understood and accepted, a clear plan for its incorporation into existing academic programs should be devised to guide the change process.

It is essential during this phase to create and sustain a strong link between national groups that are involved with preservice education and the teaching institutions themselves. Tasks in this phase should be completed before moving on to the next phase of preparing for and conducting teaching in the new/updated content.

Create a national working group. The national working group is composed of key stakeholders representing national authorities, technical experts, the academic community, professional societies, partners and donors, and the inservice training system, among others. The aim of the national working group is to coordinate and facilitate the planning, implementation and evaluation of the curriculum strengthening process in appropriate teaching institutions and their clinical practice sites. They guide the curriculum strengthening process by promoting broad understanding and acceptance of the process; providing input on policy and advocacy issues; assisting the schools during the strengthening process; and coordinating activities among partners and institutions.

Lesson Learned #1: Identifying a focal person or “champion” for the strengthening process within the national working group can help drive the process and keep it moving forward. The champion can also play a key role in mobilizing and leveraging needed funds.

Conduct a needs assessment. Detailed information on what is currently happening in the preservice education system is needed in order to develop a feasible plan of action for its strengthening. Information is collected to identify the roles and responsibilities of healthcare workers; policies and practices that influence educational content; persons/groups that influence and direct education; conditions under which teaching takes place; and conditions in the clinical practice sites.

Many countries have multiple preservice institutions, too many to strengthen at the same time. The information gathered in the needs assessment will also help determine the initial focus of the curriculum strengthening activities – a limited number of institutions (2–6) that will participate in the first round of curriculum strengthening. The program will then expand into additional schools in stages.

Lesson Learned #2: The curriculum strengthening process will have its greatest impact when implemented using a staged approach.

Develop a national plan of action. Using the results of the needs assessment, the national working group will develop a national plan of action. The plan will identify where and how the new/updated content will be introduced, the activities to be facilitated at the national and local levels, and the resources needed; coordinate activities; present a timeline; and plan for expansion as appropriate.

Orient opinion leaders and decision-makers. Additional key stakeholders who are not part of the national working group also must be made aware of the need for curriculum strengthening and understand the new updated technical content to be introduced. Focused orientation workshops are the most effective method for achieving this goal and also serve to: gain acceptance of mastery learning and competency-based training; generate support and commitment for strengthening process; and obtain endorsement of the national plan.

Create a curriculum strengthening group. The curriculum strengthening group, which will be directly responsible for reviewing and strengthening the existing curriculum and then lead implementation within each school, should include representatives of those schools involved in the first phase of implementation, and their clinical practice sites. Key individuals from the national level may also be included in this group in order to increase the likelihood that the curricular changes to be made will be acceptable on the national level.

Lesson Learned #3: A critical part of the curriculum strengthening process is to strengthen the linkages between the classroom and clinical sites. Including both teachers and clinical staff in the curriculum strengthening group is one way to promote those linkages.

Phase Two – Prepare For And Conduct Teaching

Several challenges must be overcome when incorporating new content and processes into an academic program. In most medical, nursing, and midwifery schools, agendas are already overcrowded, teaching and student assessment focus on the development of knowledge rather than clinical skills, and coordination among different academic years and courses is limited.

The role of the national level during this phase is to support teaching institutions to prepare for, implement, and monitor teaching. If more than one school in a country will introduce the new updated content, the national authorities may lead or coordinate several activities in this phase to help share experiences among schools and avoid duplication of effort.

All of the tasks in this phase are important to the success of strengthening preservice education. Depending on the needs and resources within a country, however, national authorities and teaching institutions may decide to combine certain of these tasks or activities.

Train the curriculum strengthening group. To effectively review and strengthen the existing curriculum, the members of the curriculum strengthening group must have mastery of the new updated content as well as a thorough understanding of mastery learning and competency-based training. Training classroom faculty and clinical staff together facilitates the development of a team approach to educating students.

Strengthen the curriculum. A workshop, incorporating the principles of instructional design and their practical application, is the mechanism by which the curriculum is strengthened. After reviewing current job descriptions to identify job responsibilities related to the new updated content to be incorporated into the curriculum, the curriculum itself is assessed for accuracy and appropriateness of its technical content, the appropriateness of its objectives; teaching and assessment methodologies; and the integration of skill development. Based on the results of the assessment, modifications are made to the curriculum to strengthen each of these areas. It is

important to note that all modifications are usually made within the boundaries of the existing curriculum; strengthening efforts are meant to improve or facilitate its implementation rather than replace it.

Lesson Learned #4: When strengthening curricula, it is best to start with an area where the greatest impact is possible. This may mean focusing on only limited amount of content, such as family planning, or on a specific time period in the curriculum, for example, the internship year in medical schools. Once results have been demonstrated, it may then be easier to move into other areas.

Lesson Learned #5: One key element of curriculum strengthening is to encourage rationale use of limited preservice education time. The focus should remain on essential knowledge and skills need by **all** graduates, rather than highly specialized skills that may not be used after graduation.

Develop and produce teaching, learning and assessment materials. Once the curriculum is strengthened, all the teaching, learning and assessment materials needed for its full implementation must be developed. Materials development may begin during the instructional design workshop, but often require additional time and effort for its completion. The result is a standardized, self-contained learning package that will be used by teachers, clinical staff and students. One important issue to be considered in this task is how to create an affordable and sustainable supply of these materials.

Lesson Learned #6: The use of a standardized learning package helps achieve consistency in the transfer of knowledge, skills and attitudes and in objective evaluation of student performance across teaching institutions.

Lesson Learned #7: There are many learning packages already in existence that can be used as models during materials development. It is rarely necessary to start from scratch.

Equip the institutions. Included in the instructional design process is the identification of the models, equipment and supplies needed to implement the strengthened curriculum. Ensuring that each institution is fully equipped can require a great deal of time and resources, including funds. Therefore, it is best coordinated at the national level and should be started early in the strengthening process.

Plan for implementation in each institution. The plan of action for each institution is guided by the national plan, but is specific to the needs and conditions found in each institution. The plan should identify how and when (in what sequence) the new/updated content will be introduced; additional activities and steps that are needed for implementation, such as training faculty or acquiring specific resources; how clinical sites will be prepared; and who at the national and local level will be responsible for implementation. Frequently the plan of action is developed by the institution's representatives on the curriculum strengthening group.

Orient decision-makers, faculty and clinical staff at each teaching institution. Introducing new/updated content usually has an impact on more than one course or department. Therefore, its important to orient all faculty and clinical staff who may be directly involved or affected by the new teaching as early as possible in order create awareness, understanding, and acceptance of the new/updated content and gain endorsement of the plan of action.

Train additional teachers and clinical staff. Those teachers and clinical staff who will implement the strengthened curriculum must be trained in both the technical content (knowledge and skills) and the use of teaching methods appropriate for that content. Included in this training should be an orientation to the standardized learning package that they will use. Training teachers and clinical staff together continues to foster linkages between the classroom and clinical portions of the curriculum.

Prepare clinical sites. Students must learn and practice clinical skills in sites where national guidelines and protocols are used on a routine basis. Preparing sites to function at this level often requires orienting administrators, training staff, and ensuring that appropriate patients, equipment and supplies are available, as well as providing ongoing support. This may take 6-12 months and therefore preparation of these sites should begin as early as possible in the curriculum strengthening process.

Lesson Learned #8: It's important to take advantage of the synergies between inservice and preservice systems when developing clinical practice sites. By sharing sites and trainers, both systems are able to improve their effectiveness and impact.

Coordinate teaching. As noted earlier, when introducing new updated content, more than one department or course is often affected. This requires that staff in different departments, courses and clinical practice sites coordinate their teaching activities. Coordination includes ensuring that all involved understand and carry out their roles; all essential content is covered; and that teaching in different courses and departments is complementary rather than contradictory. This coordination requires regular communication and is often best achieved by forming a small committee to act as a coordinating team that includes the institution's representatives on the curriculum strengthening group.

Conduct and monitor teaching. It is best to begin implementation of the strengthened curriculum at the start of a school year or term to avoid disrupting teaching that is already underway. Once begun, it is important to monitor implementation on a regular basis. Both quantitative and qualitative data are needed on the content, context, process and outcome of teaching. This data can be collected in many different ways, but it should be systematically documented and used to improve teaching.

Conduct followup visits. Followup visits, conducted by national-level teams with expertise in training skills, the technical content and the curriculum strengthening process, can provide teaching institutions and clinical practice sites with needed support during implementation. The objectives are to monitor progress, identify difficulties, assist with problem solving, and provide feedback on the implementation process. The first visit should be conducted several months after implementation begins and then at regular intervals as feasible.

Lesson Learned #9: Support and followup are essential for successful implementation of the curriculum strengthening process. Not only does it facilitate implementation, but also create a positive teaching learning environment and motivates teachers, clinical staff and students.

Phase Three – Review And Revise Teaching

Review and revision should be conducted **periodically**, after **each** round of teaching. Although it can be done more frequently--and should be if monitoring indicates there are major problems in

the implementation process—generally it is first conducted upon completion of the first term or school year in which the strengthened portions of the curriculum have been implemented. The review and revision process can be carried out in several days, or over several weeks. During the process, monitoring information gathered in Phase Two, if available, is reviewed and additional information collected where needed. Decisions are then made about how to revise each institution's plan of action as well as the national plan of action, if necessary.

To ensure that data from Phase Two are accessible it is important to incorporate monitoring and review activities, whenever possible, into the existing system that a teaching institution uses to monitor and evaluate teaching. The introduction of new/updated content can also be taken as an opportunity to strengthen the process that a school uses for monitoring and evaluation.

Review the institutional plan of action. Although the institutional plan of action should be reviewed periodically as part of monitoring in Phase Two, a more detailed review is needed after the first round of teaching. This review should identify which elements of the plan have action have been achieved; determine why certain activities were incomplete or delayed; and identify what actions are needed to overcome difficulties.

Assess methods and materials used. This assessment, also known as process evaluation, is used to verify that the methods and materials used in implementing the strengthened curriculum cover the learning objectives and to determine if students, teachers and preceptors understand, accept and are able to use the methods and materials. The assessment should include both an evaluation of the technical accuracy and educational appropriateness of the methods and materials. Information from monitoring as well as from a more focused review can be used for this assessment.

Measure the outcome of teaching. The purpose of this task is to determine if students demonstrate the expected knowledge and skills after participating in classroom and clinical practice sessions. The outcome of teaching can be measured at any time after students complete a session, rotation, or term that includes new/updated content; it is not necessary to wait until they have completed larger blocks of instruction. It can be accomplished by either reviewing the results of previous student assessments or by assessing a sample of students as part of Phase Three.

Revise the institutional plan of action. Using the results of the previous three tasks, the institutional plan of action is revised to incorporate actions and resources needed to strengthen and sustain teaching, as well as to guide future activities to improve implementation of the strengthened curriculum. It is important that administrators and staff discuss both achievements and difficulties faced in implementing the initial plan of action during revision.

Conduct review and revision visits. When followup visits are **not** conducted in Phase Two, review and revision visits are **essential** in Phase Three to ensure adequate monitoring of implementation takes place. As with the followup visits, review and revision visits should be conducted by a national-level team of outside assessors, in a standardized and systematic manner. These visits focus on identifying national-level problems, issues and lessons learned to benefit all the schools currently involved in implementing the strengthened curriculum and guide expansion of the strengthening process.

Review and revise the national plan of action. Review and revision of the national plan is conducted in the same way as for the institutional plans of action. In addition to identifying achievements and areas of weakness, the revised plan incorporates any actions or resources needed at the national level to sustain and strengthen teaching and to guide expansion to additional institutions.

Phase Four – Evaluate Teaching

There are four main types of evaluations. These are evaluation of the process, final outcomes, effectiveness, and impact of new teaching (see **Table 1**). **Process** refers to the changes made in the way an academic program is taught, the methods and materials used, and how teachers and students respond to those methods and materials. **Outcomes** refer to the final results of teaching, particularly in terms of student knowledge, skills, and attitudes (i.e., competence). **Effectiveness** assesses the ability of students to apply knowledge, skills, and attitude to their work after graduation (i.e., performance). It can be evaluated by finding out how well students are doing after they have left the teaching institution and started work. Finally, **impact** concentrates on improvements in the health status of a population that may or may not be related to changes in the quality of care provided by graduates.

Table 1. Evaluating the Results of New Teaching

KEY CHARACTERISTICS	TYPE OF EVALUATION			
	Process	Outcomes (Competence)	Effectiveness (Performance)	Impact (Quality)
<i>Process of Evaluation</i>	Describing changes made to the teaching and learning process	Assessing if learning objectives were achieved	Observing service delivery by new graduates	Applying a continuous, systematic audit
<i>Basic Question</i>	How did they learn it?	Can they do it?	Do they do it?	How well do they do it?
Responsibility for Formal Evaluation	Teaching institutions, national academic associations	Teaching institutions, national academic associations	Licensing authorities, professional associations, societies, employers	Health systems, organizations, hospitals, service entities
Responsibility for Routine or Informal Evaluation	Teachers and instructors	Teachers and instructors	Self (professionals, patients, peers, coworkers)	Graduates (health care providers, public health workers, managers, planners)

A key task in this phase is to evaluate the process and outcomes of new teaching at the level of the teaching institution. Because evaluating the effectiveness of teaching is difficult and costly, it is considered an optional task that should only be done as a part of a larger evaluation effort at the state or national level. Impact should be evaluated only where evaluation capacity is high and the results may be used regionally or even globally.

Most teaching institutions have experience in reviewing and evaluating the process and outcomes of teaching, particularly in relation to student competence at the end of an academic program. To evaluate the effectiveness of teaching, however, the performance of new healthcare professionals must be assessed in their work environment after graduation. An evaluation of the effectiveness of strengthened teaching determines if students are able to correctly apply their new knowledge, skills, and attitudes after graduation. The results of an effectiveness evaluation should demonstrate to teaching institutions, funding agencies, and national authorities that the resources invested in strengthening teaching produced the expected effect. In addition, the results should be used to identify areas where teaching could be strengthened further.

Regardless of how, where, or what type of evaluation is conducted, it is critical for the national working group to share evaluation results with all relevant teaching institutions. In addition, it is essential for teaching institutions to contribute to evaluation efforts, and to use evaluation results to strengthen their teaching.

Strengthening Preservice Education Made "Easier": Applying a Four-Phased Process



JHPIEGO

Lois Schaefer

Objectives

By the end of this session you will be able to:

- Apply a four-phased process for strengthening both classroom and clinical training in preservice education
- Identify components of the educational system that influence the preservice strengthening process and describe the role of each in that process
- Develop strategies to facilitate strengthening preservice education



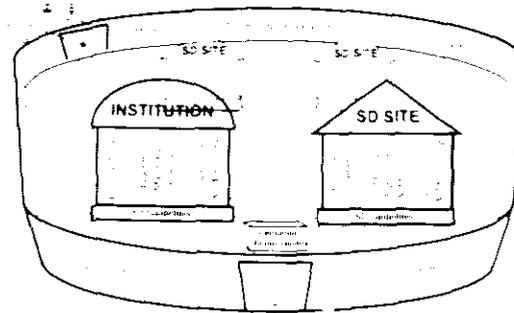
2

What is Preservice Education?

- Prepares students to become FP/RH healthcare providers (physician, nurse, midwife)
- Learning that takes place in undergraduate and graduate healthcare educational institutions (e.g., medical, nursing and midwifery schools) over a period of 1-6 years
- Ensures a basic set of skill competencies for a general healthcare provider (ideally, based on a job description for after graduation)

3

Preservice Education System for Preparing Healthcare Professionals



Advantages of PSE

- Reaches more providers at once than through inservice training
- Ensures common knowledge/skills based on updated RH policies and standards, thereby facilitating their dissemination
- Faculty are advocates for and role models of quality RH service provision
- What students learn in preservice is often how they practice throughout their careers
- Extended learning period for skill and attitude development
- More sustainable as it strengthens existing educational institutions
- Development of model service delivery sites and providers

5

The Preservice Strengthening Process

A process to incorporate mastery learning and competency-based training into health professional schools that addresses all of the elements of the preservice education system

Based on JHPIEGO's experience strengthening preservice education in 21 countries

6

The Four-Phased Process

- Creates a positive environment at the national level
- Improves existing curriculum and its implementation, both classroom and clinical, on the institutional level
- Incorporates monitoring, review and revision of the strengthening process
- Provides a basis for periodic evaluation of the process and its final results

More about the Process

- Can be applied to a continuum of interventions and any technical content to strengthen preservice education
 - A module/section in part of a 2- or 3-year curriculum
 - Strengthening multiple courses, multiple years or an entire curriculum
 - Internship year, Ob-Gyn or FPMCH rotation

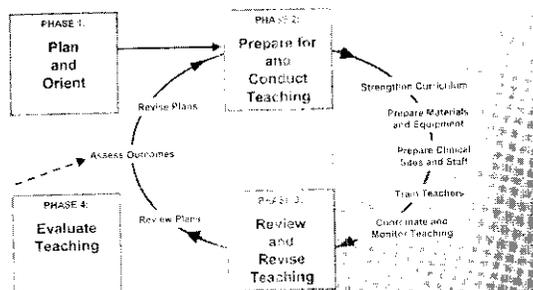
Applying the Process

- Each phase is divided into tasks and activities designed to achieve the objectives of that phase
- Each country will need to select the appropriate tasks and activities in accordance with the needs and resources available and complete them in the sequence most appropriate to their situation
 - Some tasks or activities can be omitted
 - Some tasks or activities will be to be repeated
 - Other tasks may be combined or carried out informally
 - Some tasks may not be omitted

Who Will Use the Process?

- Can be used by national authorities, professional associations and licensing bodies to help them understand the level of effort, resources and time needed to strengthen preservice education
- It can then be used by key individuals at the national institutional levels to direct the step-by-step process of strengthening the curriculum
- And it can be used by those responsible for monitoring and evaluation systems to identify their role in strengthening preservice education

Phases of Strengthening Preservice Education



Phase 1 – Plan and Orient

- Create a national working group
 - Key stakeholders
 - To guide the curriculum strengthening process by
 - Promoting broad understanding and acceptance of the process
 - Providing input on policy and advocacy issues
 - Assisting the schools during the strengthening process
 - Coordinating activities among partners and institutions

Lesson Learned #1 – Identify a champion within the system to lead the way

Phase 1 – Plan and Orient (continued)

- Conduct a needs assessment
 - To identify
 - Roles and responsibilities of healthcare workers
 - Policies and practices that influence educational content
 - Persons/groups that influence and direct education
 - Conditions under which teaching takes place
 - Conditions in the clinical practice sites
 - To determine the initial focus of curriculum strengthening

Lesson Learned #2 – The greatest impact is achieved by using a staged approach

13

Phase 1 – Plan and Orient (continued)

- Develop a national plan of action
 - The plan will
 - Identify where and how content will be introduced
 - Identify activities to be facilitated at the national and local levels
 - Coordinate activities
 - Identify the resources needed
 - Present a timeline
 - Plan for expansion as appropriate
 - The plan is based on the needs assessment and is frequently developed by the national working group

14

Phase 1 – Plan and Orient (continued)

- Orient opinion leaders and decision-makers
 - Create awareness of the need for strengthening and understanding of the new/updated technical content
 - Gain acceptance of mastery learning and competency-based training
 - Generate support and commitment
 - Obtain endorsement of the national plan
 - Accomplished through:
 - Information dissemination
 - Presentations
 - An orientation workshop

15

Phase 1 – Plan and Orient (continued)

- Create a curriculum strengthening group
 - Representatives of schools and clinical practice sites involved in first phase of implementation
 - Key individuals from the national level
 - This group will
 - Review and strengthen curricula
 - Create action plans for their institutions
 - Facilitate implementation of the action plan in their institutions

Lesson Learned #3 – Strengthen linkages between schools and clinical sites

16

Phase 2 – Prepare for and Conduct Teaching

- Train the curriculum strengthening group
 - Technical update skills standardization if appropriate
 - Clinical training skills
 - Without this training, the group will not have a basis for effectively strengthening the curriculum

17

Phase 2 – Prepare for and Conduct Teaching (continued)

- Strengthen the curriculum
 - Instructional design workshop
 - Assessment of existing curriculum for
 - Accuracy and appropriateness of technical content
 - Appropriateness of objectives, teaching and assessment methodologies, integration of SM, development materials
 - Work with the boundaries of the existing curriculum where improvements are made

Lesson Learned #4 – Focus on the area of the curriculum where the greatest impact is possible

Lesson Learned #5 – Foster national use of limited preservice time

18

Phase 2 – Prepare for and Conduct Teaching (continued)

- Develop and produce teaching, learning and assessment materials
 - Often begins during instructional design workshop; may require additional work
 - Result: standardized learning package
 - Determine how to create an affordable and sustainable supply of materials

Lesson Learned #6 – A learning package helps ensure standardized transfer of training from teacher/preceptor to student

Lesson Learned #7 – Adapt existing curricula and materials whenever possible; don't start over each time!

19

Phase 2 – Prepare for and Conduct Teaching (continued)

- Equip the teaching institutions
 - Equipment and supplies in adequate quantities
 - Who can provide financial support?
- Plan for implementation in each institution
 - Plan of action tailored to each institution, including budget and timeline
 - Orientation, training, preparation of clinical practice sites, resources needed, process for monitoring/reviewing/revising, sustainability of materials, trained personnel

20

Phase 2 – Prepare for and Conduct Teaching (continued)

- Orient decision-makers, faculty and clinical staff at each teaching institution
 - Create awareness, understanding, and acceptance of new/updated content and teaching methodologies
 - Generate their commitment and endorsement of plan of action
 - One day meeting or workshop generally adequate

21

Phase 2 – Prepare for and Conduct Teaching (continued)

- Train additional teachers and clinical staff
 - Technical update/skills standardization if appropriate
 - Clinical training skills
- Prepare clinical practice sites
 - Orient administrators, supervisors and clinical staff
 - Train clinical staff
 - Ongoing support through followup visits
 - Ensure necessary supplies and equipment are available

Lesson Learned #8 – Take advantage of synergies between preservice and inservice systems

22

Phase 2 – Prepare for and Conduct Teaching (continued)

- Coordinate teaching
 - To help ensure that:
 - Administrators, teachers and clinical practice sites understand and carry out their roles in implementation
 - All essential elements of the new/updated content are covered
 - Teaching in different courses complements each other
 - To coordinate teaching:
 - Form a small committee to act as a coordinating team
 - Add the implementation process to the agenda of regular staff meetings

23

Phase 2 – Prepare for and Conduct Teaching (continued)

- Conduct and monitor teaching
 - Quantitative and qualitative monitoring data is needed to:
 - Assess whether teaching is being implemented according to the plan
 - Identify achievements and difficulties with teaching
 - Specify actions needed to sustain achievements and/or overcome difficulties
 - Collected through:
 - Discussions and interviews
 - Written questionnaires
 - Observation
 - Periodic visits by members of curriculum strengthening group
 - Monitoring should also take place at the national level

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Phase 2 – Prepare for and Conduct Teaching (continued)

- Conduct followup visits
 - To assess and support implementation; **provide feedback**
 - Standardized implementation
 - Feedback on teaching and **technical skills**
 - Assess availability and use of **resources**
 - Problem solving
 - Identify support needed from **national level**
 - First visit within 3-6 months of **start of implementation**
 - Then every 3-6 months
 - 1-2 days for each visit

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Phase 2 – Prepare for and Conduct Teaching (continued)

- Conducted by teams with expertise in **training skills, the new updated content, and curriculum strengthening process**
 - Members of curriculum strengthening group
 - Members of institutional working group
- Quantitative and qualitative data
 - Content of teaching
 - Context of teaching
 - Process of teaching
 - Outcome of teaching

Lesson Learned #9 – Provide support and followup to the schools as they implement the strengthened curriculum

26

Phase 3 – Review and Revise Teaching

- Review the institutional plan of action
 - Identify which elements of the plan were achieved and which were not and why
 - Identify what additional actions are needed to overcome difficulties
 - Review all areas, including:
 - Orientation
 - Training
 - Preparation of clinical practice sites
 - Materials
 - Placement, implementation and coordination of teaching
 - Through individual review, **review meetings, review and revision visits**

27

Phase 3 – Review and Revise Teaching (continued)

- Assess the methods and materials used
 - Two main questions
 - Are essential learning objectives included in methods and materials? (**technical evaluation**)
 - Do students, preceptors and teachers understand, accept and use the prepared materials? (**institutional evaluation**)
 - Assessed by:
 - Monitoring ongoing teaching
 - Reviewing the materials used
 - Conducting review and revision visits

28

Phase 3 – Review and Revise Teaching (continued)

- Measure the outcome of teaching
 - To determine if students demonstrate **expected knowledge and skills after participating in classroom and clinical practice sessions**
 - Can be measured after **any amount of teaching**
 - Assess the outcome by:
 - Reviewing the results of previous assessments
 - Assessing a sample of current or former students

29

Phase 3 – Review and Revise Teaching (continued)

- Revise the institutional plan of action
 - To determine actions and resources needed to **improve institutional teaching**
 - To update the implementation of future activities to **improve institutional teaching**
 - Assign responsibility to **same individuals** that developed the original plan of action

30

Phase 3 – Review and Revise Teaching (continued)

- Conduct review and revision visits
 - When followup visits are not conducted in Phase 2, review and revision visits are **essential** to ensure adequate monitoring
 - Conducted by national-level team of outside assessors, in a standardized and systematic manner
 - Focus is on identifying national-level problems, issues and lessons learned to benefit all schools currently involved and guide expansion
 - Key component: feedback provided to institution at the end of the visit

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Phase 3 – Review and Revise Teaching (continued)

- Review and revise the national plan of action
 - Identify which elements of the plan were achieved/effective and which were not and why
 - Incorporate any actions and resources needed at the national level to sustain and strengthen teaching
 - Review all areas, including:
 - Orientation
 - Training
 - Curriculum strengthening activities
 - Preparation of clinical practice sites
 - Resources
 - Implementation of teaching
 - Assistance and coordination

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Phase 4 – Evaluate Teaching

- Process evaluation: describe and assess the changes made to the teaching/learning process to identify ways to improve it
- Outcome evaluation: assess student competence at the end of the academic year; their ability to apply knowledge, skills, and attitudes in an ideal setting
 - Outcomes are the direct result of changes in teaching
- Evaluation of the effectiveness of teaching – assess ability of students to apply their knowledge, skills and attitudes on the job after graduation

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Effects and Outcomes of Strengthening Preservice Education

- Immediate Effects – before teaching even begins
 - Revised curriculum and training materials harmonized with and reflecting national guidelines
 - Updated clinical practice in quality service delivery sites
- Outcomes – once teaching is underway
 - Students are trained in and providing essential services
 - Student clinical practice contributes to ongoing service delivery
 - Students are immediately productive as service providers when they take their place in the workforce

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How Do We Know It Works?

- Philippines – 3 years after program ended:
 - Strengthened preservice FP/RH nursing and midwifery education continues in 16 schools
 - All schools continue to implement skill-based FP/RH component
 - Competency-based training methods and teaching aids (including instructor's guides and reference materials) still being used
 - Graduates perform better on licensing examination
 - Evidence of scaling up

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How Do We Know It Works?

- Ghana – comparison of graduates from intervention and nonintervention schools in May 2002 after 4-year program
 - Intervention group had significantly higher scores for knowledge
 - Intervention group had statistically significant higher scores on key clinical skills
- Turkey – results of a 4-year intervention
 - By using the same clinical practice sites, one set of trainers meets both inservice and preservice training needs; demonstrated impact on service delivery practices
 - A national-level system is functioning to certify midwifery students to provide RH/FP services during preservice

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Designing Effective Learning Experiences

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Guidelines for Creating Performance Objectives

Good performance objectives are important to successful learning. They create a foundation for the instruction you develop. Objectives express tangible, measurable behaviors that can be assessed concretely. Solid performance objectives are also the basis for effective test items. Refresh your memory on the structure of objectives with the guidelines below:

What are performance objectives, and what is their function?

- State what the learners will be able to do following successful instruction
- Describe observable behavior of students
- Direct the design and development of materials
- Eliminate ambiguity
- Ensure that training materials include only essential content

Performance objectives use precise verbs to describe learner behavior.

“The learner will....”

- State
- Identify
- Define
- Select
- Construct
- Discriminate
- Perform
- Choose

Performance objectives are derived from the training goals and learner profile.

Performance objectives describe:

- What learners do in behavioral terms
- Conditions for performance
- Criteria for mastery

Sample performance objective:

“Without referring to the text, the learner will state the most common health conditions affecting the reproductive tract. Response should include at least 6 health conditions.”

A map of the sample performance objective:

Behavior	<i>the learner will state the most common health conditions affecting the reproductive tract</i>
Condition	Without reference to the text
Criteria	Response should include at least 6 health conditions.

Text Design Guidelines

Instructional principles for text design

- **attention/motivation**
- **influence/credibility**
- **objectives**
- **content/familiarity**
- **mental set**
- **chunking**
- **illustrations**
- **organizers**
- **examples**
- **text layout**
- **relevant practice**
- **feedback**
- **review/summary**
- **memory/reference**

Text features that influence learning

- **orienting devices**
 1. headings
 2. organizers
 3. key words
- **concretize content**
 1. illustrations
 2. analogies and metaphors
 3. flowcharts
- **learner interactions**
 1. questions and practice
 2. level of interaction
 3. generative activities

Text features to assist readers

- **structure**
 1. topic made obvious
 2. structure matches purpose
 3. consistent structure
- **coherence**
 1. relationships among ideas made obvious
 2. clear referents
 3. consistent sequence
- **unity**
 1. all text should have a purpose
 2. set off secondary information
- **audience**
 1. take into account prior knowledge
 2. use technical terms only as necessary

Minimalist design

- **common problems**
 1. too much information
 2. uses rote learning
 3. delays "real" work
 4. designed to be followed step-by-step
 5. weak organization
 6. poor layout
- **key principles**
 1. reduce verbiage
 2. use functional organization
 3. involve learners in real work
 4. use clear, concise wording
 5. use illustrations, analogies and examples
 6. make the material fit the audience

Exercise 3: Creating Engaging Training

Trainers often have limited time and resources to bring about improvements in learning. Therefore, the question of what and how to change is essential. The table on the next page lists factors within “dimensions” of instruction: Instructional method, Media, and Knowledge Construction. A thoughtful change in any one of the factors within these dimensions can create a more innovative, engaging approach to training.

Directions: Read the scenario that follows. Then refer to the table on the next page. Within one of the dimensions, choose just one factor you would change to improve the learning problem described in the scenario. Use the fill-in box to the right as you describe the change.

Training scenario:

A trainer is responsible to train about 120 rural health care providers. The providers work in small, rural clinics. Historically, these providers have been trained in groups of 15-20 providers at a time. They must travel to the city from their villages to attend the training, which is comprised of four 90-minute segments, all taking place in one day.

The content is relatively complex and written by a medical doctor from the university. The trainer hands out a densely-worded pamphlet at the beginning of the training. Learners are to refer to this throughout the day. The trainer uses flipcharts, posters and large diagrams to explain the medical points as she lectures. At the end of every 90 minute session, the trainer leads a discussion to reinforce the points in the content, using a question and answer technique to informally assess how well the learners are grasping the content.

At the end of the day, the trainer administers a paper-and-pencil test to assess learner comprehension of the content. The trainer then gives the group the correct answers for the test. Assessment scores average about 75% correct, but observation of learners back on their jobs several weeks later indicates that the actual clinical behavior learners were expected to display around the content has not been incorporated in their daily practice.

Factor to be changed

Rationale

Expected benefits

Constraints

Cost (low, medium, high)

Instructional Dimensions (Exercise 3)

Instructional Method

Lecture/group-based instruction

- Familiar and comfortable
- Frequently fails to produce desired learning

Small-group problem solving

- Considered excellent practice
- Requires more planning and facilitation

Self-paced learning

- Requires [especially] good materials
- May free learners to learn more efficiently

Practice

- Lets learners try out and build skills

Media

Print

- Textbook
- Workbook more interactive?
- Picture book easier to read?

Audio

- Live speech
- Radio
- Tape

Multimedia

- Slides
- Video
- Computer/Web-based training

Knowledge Construction

Textbook

- Ordered by topic outline or taxonomy

Learner-centered

- Ordered according to learners' previous knowledge, capabilities, or other variables, i.e., culture

Task-oriented

- Ordered according to steps of procedure, focused on task completion, not general knowledge

An Alternative Learning Design for Xanadu

(Exercise 4)

Background

The Ministry of Health (MOH) in Xanadu wants to scale-up postabortion care/life saving skills/family planning (PAC/LSS/FP) services as part of its national Safe Motherhood program to reduce high levels of maternal and neonatal mortality and morbidity. The program currently includes classroom instruction combined with clinical practice, but there have been some shortcomings with the approach. The MOH has heard about distance learning but has no direct experience with it. They are interested in discussing it further and have asked for your help. A preliminary meeting is scheduled with several representatives of the MOH's Health Education Unit.

Meeting to plan an alternative learning approach

You agree to work with the MOH and several key stakeholders to discuss the feasibility for using distance learning in this setting. During the first meeting you confirm MOH wants to develop a pilot project for expanding and scaling up PAC/LSS/FP services in three of Xanadu's 10 regions. A needs assessment has been done.

You are able to benefit from several key lesson learned in a previous pilot program implemented several years ago in which providers received training in Safe Motherhood. Notably,

- trainees were away from their facilities for a substantial amount of time (at least 3 weeks, all at once), thus reducing access to services, and
- many trainees were not able to complete their practical training due to a combination of low caseloads of appropriate clients/patients and too many trainees in the training sites at one time.

Your goal is to develop a learning approach to address these issues and the significant challenge of sustainability—that is, establishing an effective approach to preparing providers to offer PAC/LSS/FP services consistent with performance expectations and service standards in a way that keeps cost in line with current budgetary realities.

During the meeting you indicate you believe an alternative to classroom training could be appropriate for this situation. You describe several successful distance learning approaches you have worked on. You tell the group that more information will be needed.

Activity A: *What additional information do you need about learners?*

Please pause here.

Now that you know more about the learners and opportunities for learner support, think about how you might blend several learning approaches (on-the-job training and peer learning, for example) to create a learning intervention in PAC/LSS/FP services.

Activity C:

1. *What additional information do you need?*

2. *What ideas do you have about how you might blend several learning approaches?*

Please pause here.

Putting your plan into words (and pictures)

You believe the group now has enough information to develop a rough design for its alternative approach. You remind the group, though, that this design will likely change and evolve as additional questions come up and are answered. It has become clear that, as much as possible, the MOH wants the content of the alternative approach to match the content used in the traditional, group-based course. Some modifications will be necessary, of course.

Activity D: *On the back of this page, outline (briefly describe) an alternative approach you might recommend to train providers of Safe Motherhood services in Xanadu. Then make a drawing showing the relationships that make up a learner support system. (No artistry required. Boxes, circles, and arrows are fine!)*

As the meeting concludes, the group writes up a summary, a list of agreements, questions still remaining, and next steps that you will use to create a short report. Several more meetings will be necessary, but you now have a plan for how you will proceed and the beginnings of a proposal for an alternative learning approach that you will continue to refine with stakeholders.



Designing Effective Learning Experiences

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Workshop Goals

Improve ability to

- Choose effective training strategies
- Select or develop appropriate content
- Create engaging training materials
- Develop alternative training approaches

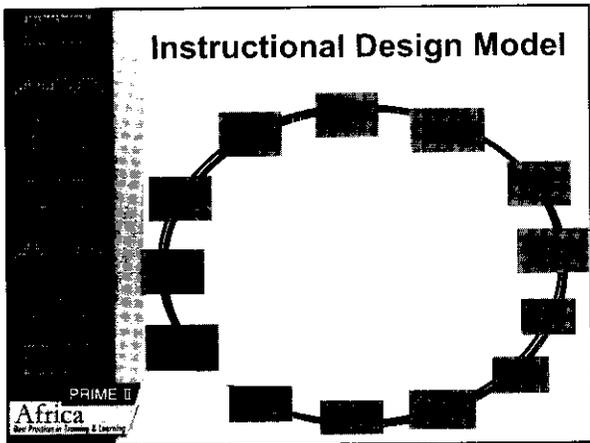
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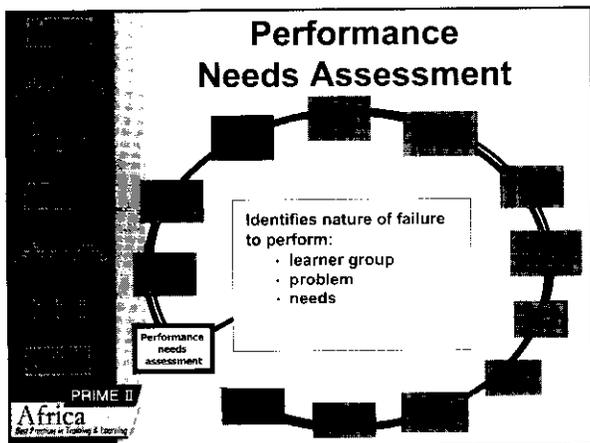


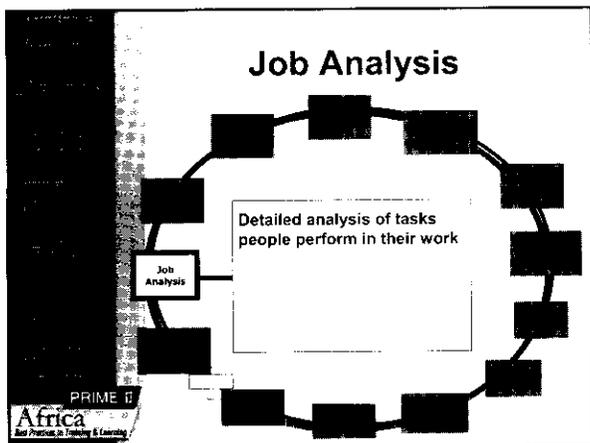
Outline of the Workshop

- Designed instruction
- 4 interactive exercises
 - Instructional strategy
 - Selecting content
 - Creating engaging training
 - Alternative learning approaches
- Discussion

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Learning Goal

Defines learning outcome in performance terms, based on:

- performance needs assessment (PNA)
- job analysis

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Knowledge & Skills Analysis

Identifies:

- knowledge and skills to achieve learning goal
- organization of knowledge and skills

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Learner Analysis

Gathers information about intended learners so instruction can be matched to learners

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Performance Objectives

Specific statements of what learners will do after instruction

Performance Objectives

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Assessment Items

Tests and/or other measures of learning outcomes; based directly on performance objectives

Assessment Items

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New Frontiers in Teaching & Learning

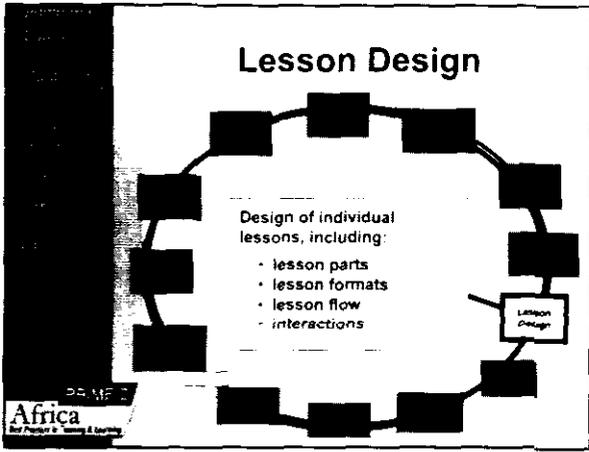
Instructional Strategies

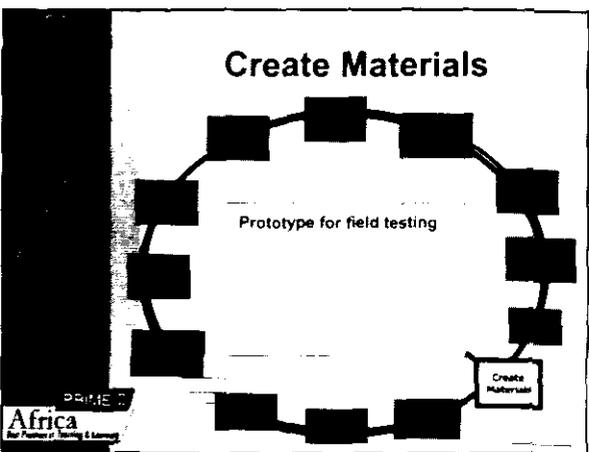
Plan for training, including:

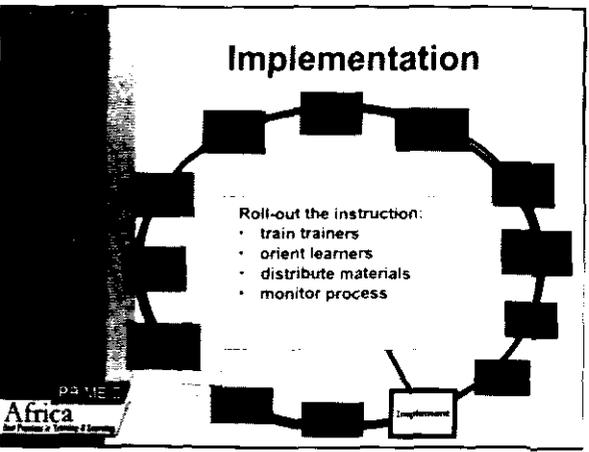
- learning principles
- learning events
- instructional methods
- instructional media

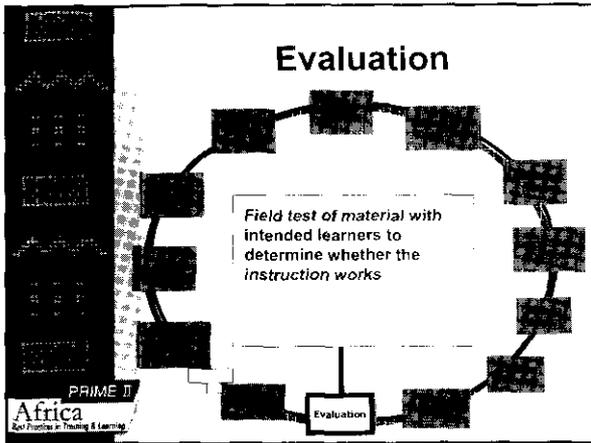
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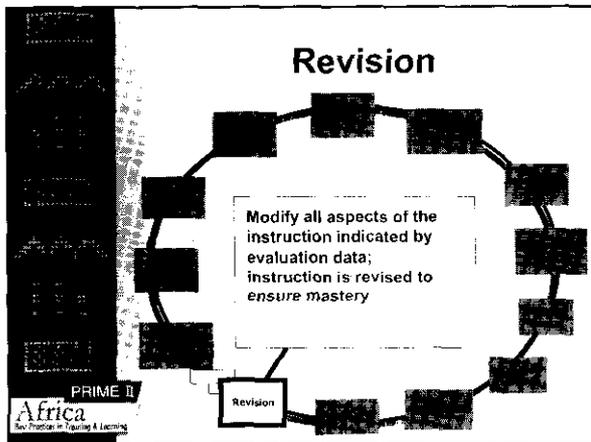
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New Frontiers in Teaching & Learning

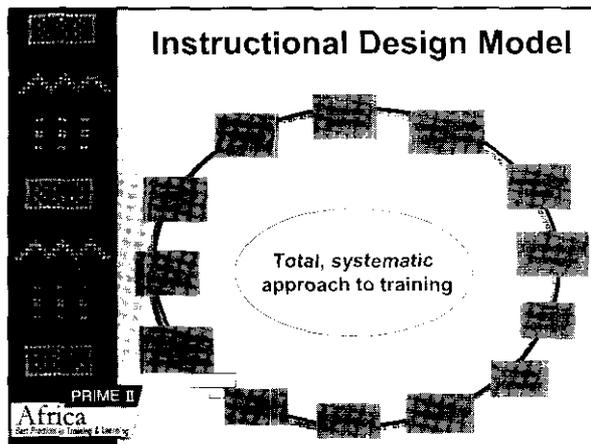


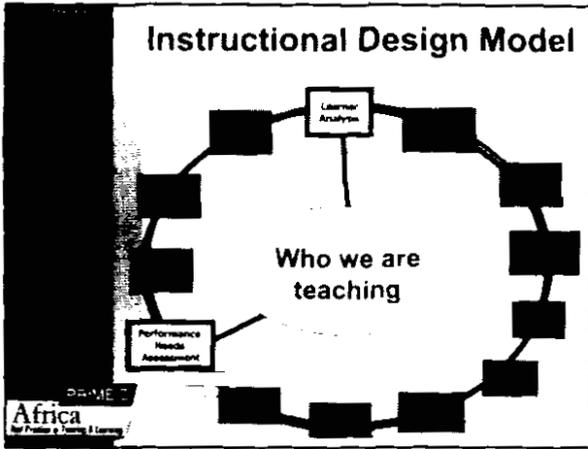


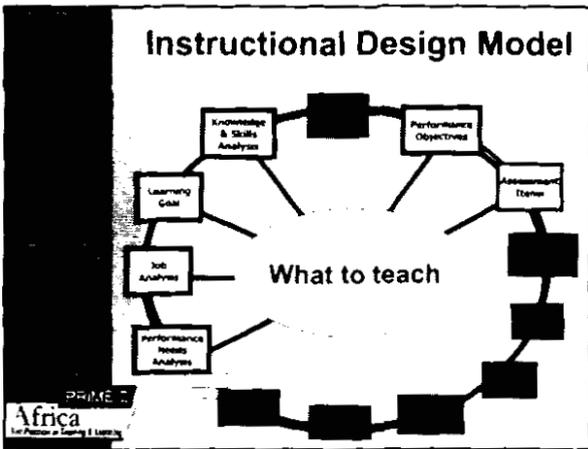


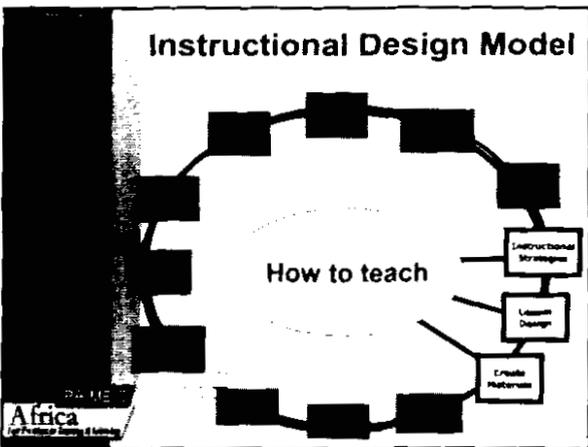


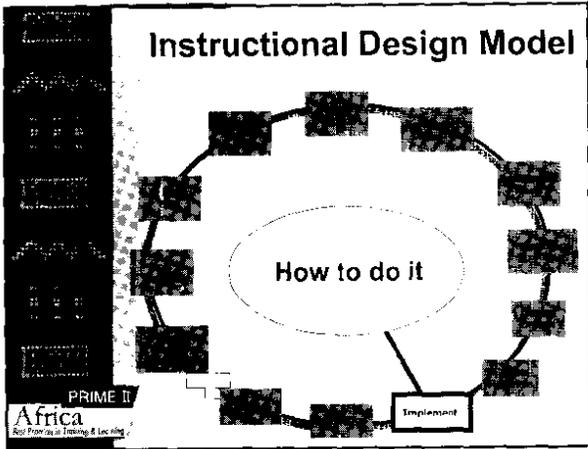


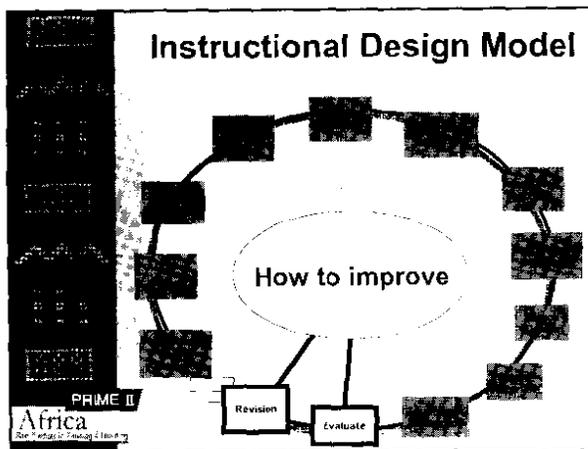












Exercise 1: Selecting a Learning Strategy

Given short case studies, participants will develop a learning strategy and rationale.

This activity will focus on:

- determining suitable instructional format
- instructional method
- instructional medium

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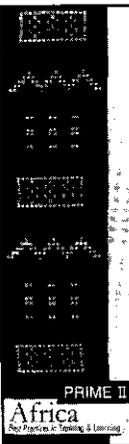


Exercise 2: Selecting Content

Given a goal and objective(s) and content, participants remove what isn't needed and add what is needed.

This activity will focus on:

- adapting content to fit objectives
- editing content to remove unnecessary information
- identifying information that should be included



Exercise 3: Creating Engaging Training

Given a training scenario and table of instructional dimensions, participants will manipulate factors to create a more engaging learning experience.

This activity will focus on:

- What is engagement?
- How do we know learners are engaged?
- Is engagement
 - expensive?
 - time-consuming for developers?



Exercise 4: Alternative Learning Approaches

Given a paper-based simulation, participants will design an appropriate alternative learning approach.

This activity will focus on:

- planning with stakeholders
- exploring alternative approaches to group-based training
- developing an effective learner support system

**Creating and Using
Interactive Simulations for Training**

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Workshop Objectives

Participants will be able to:

1. Discuss advantages and limitations of using interactive simulations in training
2. Discuss requirements and options for developing and using interactive simulations in training
3. Describe the process for developing interactive simulations
4. Describe strategies and techniques that can be used in interactive simulations

Workshop Plan

Goals/activities

1. Participants analyze a role-playing simulation
 - Provide example of a role-play simulation and analysis of structure
 - Post role-play discussion includes discussion of paper-model for the role-play
 - Introduction of the concept of structured simulations
 - Overview of underlying structure to simulations
2. Participants discuss the realities of using simulations in their practice
 - What they know is being used
 - Where they would like it to be used
 - Problems and shared experiences
3. Participants receive and react to a teaching piece about interactive simulation
 - Depiction of simulation as a carefully planned training process
 - Definition of interactive simulation as a learner-centered, experiential tool
 - ✓ reinforcement of previously-acquired knowledge
 - ✓ immersion into environment as introduction

- ✓ replacement for dangerous or unwieldy live experience
 - Research about simulation effectiveness
 - Continuum of simulation strategies across three dimensions
 - ✓ Level of interactivity
 - ✓ Level of technology
 - ✓ Level of similitude
4. Participants identify topics and objectives in their work that are suitable for simulation
- Potential training goal
 - ✓ Statement of training goal
 - ✓ Rationale for simulation with this goal
5. Create a “workplan” for a simulation in their own practice that includes
- Teaching points the simulation will reinforce
 - Scenario with decision points
 - Desirable option (choice) for each decision point
 - Less desirable options (choices) for each teaching point
 - Consequences of options at each decision point

Information about Simulations

I. Why Use Simulations for Training

- Realistic situations
- Increased motivation
- Greater engagement
- High quality feedback
- Improved performance, not just learning information

II. Principles for Using Simulations

- Learning should be situated in real context
- Knowledge can't be fully understood outside of its context
- Emphasis should be on performance
- Practicing the performance and *getting feedback* are essential

III. Advantages of Using Simulations

- Engaging
- Delivered to providers' location
- Realism
- Transfer of learning
- Skill building
- Attitude learning
- Consistent training
- Repeatable
- Accelerate transfer & application
- Increase depth of competency
- Fosters hands-on problem solving

IV. Disadvantages

- Time consuming to develop
- Initial expense
- Availability of technology
- May oversimplify complex realities

V. Simulation-Based Learning Provides Benefits in Six Key Areas

- **Accelerated learning:** Simulation can reduce the time required for competency and increase the depth of competency. Studies have shown that simulation can make a student proficient at a skill four to six months earlier than those who took a training class but had no application of the knowledge.
- **Scalability:** Simulations are highly scalable, which can lead to increased throughput in learning programs. Computer-based simulations allow more people to be trained in a shorter time frame than the traditional method of learning in hands-on labs.
- **"Anywhere" access:** Simulations enable people to practice exercises repeatedly and from any location. This is particularly useful for skills that need to be practiced on or with equipment.
- **Lower costs:** Simulation can provide significant cost savings. If conditions are difficult or expensive to reproduce during training, simulations can be a lower cost option.

- **Increased attention span:** Interactivity holds the learner's attention longer than typical instruction. Increasing the intensity and time of the student's attention improves the quality and the retention of learning.
- **Learner control:** Learners are able to control the pace of simulations, the path the simulations take, the amount of time they spend using simulations, where they use the simulations, schedule for using the simulations and the amount of feedback they receive, all of which enhance learning.

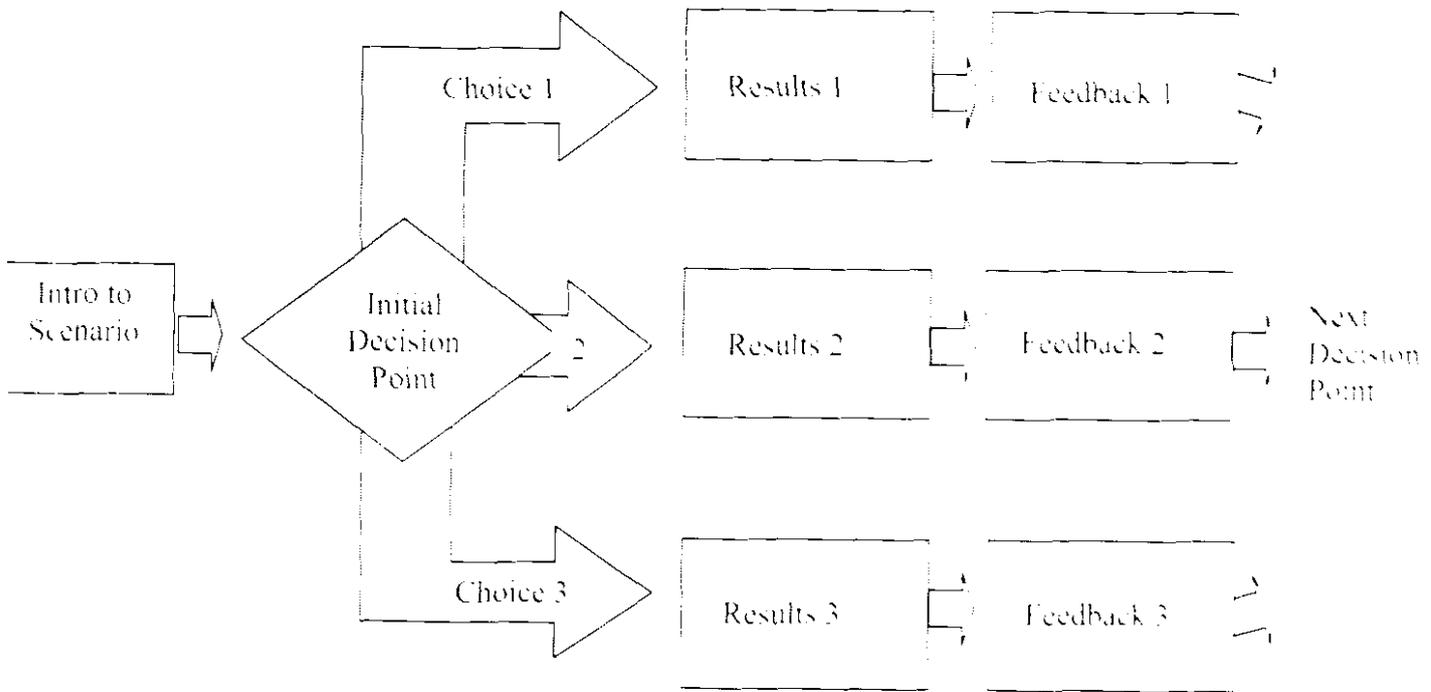
VI. Necessary Design Elements for Simulations

- Authentic & relevant scenarios
- Decisions points
- Desirable and less desirable choices
- Relevant feedback on choices
- Replayability

VII. Instructional Elements for Simulations

- High quality feedback based on learners' choices
- Expert advice & mentoring
- Sound learning theory

Basic Flow in Simulations



Storytelling for Learning Transfer

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HEALTHCARE LEARNING INSTITUTE

Storytelling for Learning Transfer

Narratives are the stories we tell ourselves about our world and are central aspects of the human ability to transfer knowledge and experience. Organizations are rediscovering this technique and reframing it to deepen learning and uncover creativity synergy. The power of story can be used to promote retention, motivation, and learning application. Most of all, it enables the efficient transmission of complex and multi-level information. Join us for a cutting-edge session as we skirt the edge of science and art to explore a new approach to story. During this workshop, you will match design to application, message to audience, and develop a story to enhance the effect of training.

Learning Objectives

At the end of this session, participants will be able to:

1. Identify the factors that make story an effective method of learning transfer in the health field.
2. Describe training design considerations that match story to the desired impact.
3. Develop a story strategy to enhance the effect of training.

Transfer of Learning

From facts to information to knowledge, there is the addition of meaning, context and texture. A fact does not stand up unless the perspective of the learner is known. For example, if the fact is that someone is detail-oriented, that fact can be perceived as positive or negative. The action that may be taken as a result of that fact is determined by the perception of the learner/observer/hearer of the fact.

Problem Learners - Smart People

Smart people are often a challenge to teach. What is in the way of learning, when one already "knows"? what is involved in unlearning an old way to incorporate a new behavior?

According to Chris Argyris, a professor of psychology at Harvard University, smart people have learned how to be smart and look smart. As a result they evaluate what it takes to be 'in the know' and are often the last to admit error. In addition, they are often more able to rationalize their views than less educated people.

Stories are powerful because they get past "know it all" opposition. They are indirect.
Stories help to - Demolish Certitude. Stories are more *TRUE* than facts.

Stories are for Learning

We talk about stories as if they are one large undifferentiated blob. In fact, they are a very sophisticated means of creating connection, while transferring information and influencing others. They can do all of these things at once or one at a time. It is up to the teller.

Story is directional; someone tells it and someone listens. They can be initiated by a leader and directed towards a learner or they can be elicited by a learner who wants to know. Then again, they can be a product of a collective assessment of meaning, in a community setting. These are the players:

- **Leader to Learner**
The leader or facilitator can tell stories that illuminate complex meanings, reinforce memories, and motivate learners to action.
- **Learner to Leader**
Leaders can elicit stories from the participants in the learning event. In this way, participants can re-frame their experiences in light of the new information and can help other listeners learn from their experiences. Allowing learners to tell their stories corroborates the new information and respects the prior experiences of adult learners.
- **Collective Meaning**
As in the old practice of community storytelling, learners re-experience a situation or simulation together and learn its meaning collectively. This is important for standardization of the new learning application.

Why Story?

If telling stories has lasted this long, there must be something to it, David Armstrong, Managing by Storying Around.

Story is more powerful than didactic teaching because it:

- Overcomes learner resistances
- Dynamic tool of influence
- Replays in the mind of the listeners
- Encourages co-creation
- Natural memory booster
- Sends messages on many levels in a short time
- More profound – communicates deeper truths

In addition, Stories are more TRUE than facts because stories are multidimensional. A story goes down like butter in that the message is digested by the listener and is easily swallowed. Stories are indirect and by being indirect can address difficult issues without offending.

Story Types

There are many types of stories. We use stories for transmission of influence. One prominent storyteller, Annette Simmons, suggests 6 story types:

- Who I Am
- Why I Am Here
- The Vision
- Teaching
- Values-in-Action
- I Know What You Are Thinking

"No one cares what you think, until they know that you care."

Can you think of other types of stories?

- **Stories for Action**

Stephen Denning, former World Bank IT manager, and author of a wonderful book on the *Springboard* story, says that there is a best practice method for developing a story that leads to action. They are:

- Protagonist
- Predicament
- Resolution
- Establishing Meaning
- Implications
- Story Prologue

This is a subset of the classic story archetype that is used in all stories and in our Hollywood films. But, it is different from the story I just read to you. How?

- **Stories to Remember**

Human beings have been telling stories since we have had language. We are uniquely suited to the story form. In fact, this may be the one characteristic that we have that makes us human. We can stay up 'til the wee hours of the night telling stories. But one hour in a typical classroom puts us out. Why fight our natural way of learning? Our memories of stories so far outweigh the ability to keep facts and data in our heads that forensic science now realizes that we create ourselves through stories and not the other way around. Tell stories to keep the ideas fresh, to maintain them in memory, to allow us to use them at will to make decisions, and to keep us awake and learning.

Why is Now the Right Time for Using Story?

- We are starving for connection
- The isolation brought about by the Internet
- Sound bites
- Lies
- Positive thinking (mental censorship)
- Lack of ethics in the business community

What is it about the International Health Field that makes Story a particularly powerful tool for learning?

There are many reasons that this is a particularly rich tool in the global health care arena. Following is a partial list of the factors that make this art form relevant.

- Multi-Cultural Learners
- Emotional component of Learning
- Geographic Dispersion of Practitioner
- Need for Behavior Change
- Ability to Extrapolate to unforeseen conditions
- Application to Different Contexts
- Cross-Training Function

How is story currently used?

Stories Ability to Transfer Complexity

One of the most salient facts is that stories have the ability to transfer information that contains multiple levels of complexity and speaks to the listener at the level that the listener understands.

Ex: **Listen to a Story**

Your listening activity is to be aware of the messages that are being conveyed.

- What, after I tell you this story, do you now think about me (In other words, what messages are you getting about the storyteller?)
- What messages do you take from the story about stories?
- What will you do with this story?
- What messages about your own approach are you developing as a result of my telling this story?

- **Stories to Motivate**

Stories that move one emotion to another. They have the power to change minds, attitudes, and perceptions. The difficulty of finding the underlying message. Think of your own favorite. What is the message of that? An end with the statement: "Remember, it's not the number of friends you have that has made a difference in your life."

7c. Story Continuum

Push and Pull stories are used to motivate students to learn. Push stories are used to motivate students to learn. Pull stories are used to motivate students to learn. Push stories are used to motivate students to learn. Pull stories are used to motivate students to learn.

7d. Stories and Pull Stories

7d.1. This is a 1970s story.

- What? Tell Story
- Plan to Learn from Story

7d.2. This is a 1970s story.

7e. Story to Learning Objective

7e.1. This is a 1970s story. It is a story about a person who is trying to learn. It is a story about a person who is trying to learn. It is a story about a person who is trying to learn. It is a story about a person who is trying to learn.

Story Co-Creation

7e.2. This is a 1970s story. It is a story about a person who is trying to learn. It is a story about a person who is trying to learn. It is a story about a person who is trying to learn. It is a story about a person who is trying to learn.

Story Development Strategy

- Find Points of Difficulty in Learning Plan
- Choose a 'Push' or a 'Pull' story
- Develop the Story Strategy (Design and or Questions)
- Plan to Learn from the Story

Learning Point	Desired Outcome	Story Design



Now that you have started to integrate story and learning, keep a log. Capture stories that teach, Capture stories that your learners tell to use with other learners. Teaching and storytelling are both recursive processes. We learn from what we hear and we tell what we learned. Keep up the good work!

Storytelling for Learning Transfer



Presenter: Gail Rae
Manager, Professional Development
Population Leadership Program



Transfer of Learning

➤ Facts

A fact is like a sack - it won't stand up if it's empty.

➤ Information

➤ Knowledge

➤ Learning



The Problem of Smart People



"God grant me the serenity to accept the people I cannot change, the courage to change the one I can, and the wisdom to know it's me." Anon



The Power of STORY



Story goes down like butter



Stories for Learning

Leader



Customer

Partner

Collective Meaning



Why Now?

- We are starving for connection
- The isolation brought about by technology
- Sound bites
- Lies
- Positive thinking (mental escape)
- Lack of ethics in the business community



Story in the Health Field

- ▶ Multiple Learning Styles
- ▶ Multiple Dimensions of Learning
- ▶ Multiple Dimensions of Practice
- ▶ Flexible Learning Outcomes
- ▶ Multiple External Networks of Learning
- ▶ Multiple and Different Contexts
- ▶ Cross-Learning Education



Why Story?

- ▶ Overcomes obstacles
- ▶ Heightens self-awareness
- ▶ Inspires and motivates others
- ▶ Builds trust and rapport
- ▶ Develops empathy
- ▶ Success stories are more powerful than theory
- ▶ More memorable than statistics and numbers

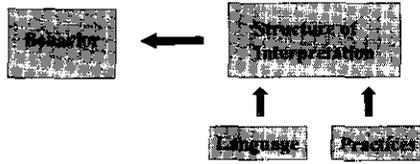


The Amoeba Theory of Learning



Why We Are Not Amoebas

Why doesn't behaviorism work with our learners?



Listening to Stories

Exercise

What messages do you get from this?

- Emotional
- Motivational
- Your Story
- Informational
- Relationship with speaker



Transfer of Complexity

- What messages do you take from this story?
- What will you do with this story?
- What messages about your own approach are you developing as a result?
- What, after I tell you this story, do you now think about me?

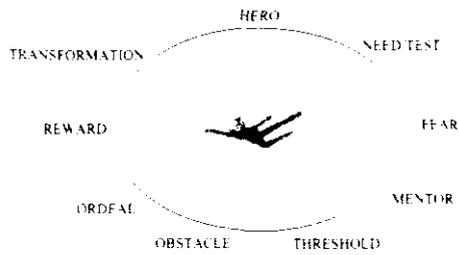


Story for Action

- Protagonist
- Predicament
- Resolution
- Establishing Meaning
- Implications
- Story Prologue



Story Archetype



Story Purpose

Action → → → → → Motivation



Push and Pull

Hosts

W
S
C
L

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

Match Story

Letters

1. the car
2. the house
3. the young man

Story Completion

Listeners

4. Listen to story
5. Take notes as follows:
 - Do you have a similar story?
 - How does your diff.?
 - What images come to mind when you hear the story?
6. What can the listener and the teller learn from this?



Story Development Strategy

- Find points of difficulty in Learning Plan
- Choose a "Push" or a "Pull" story
- Develop the story strategy
- Plan to learn from the story

The true test of a story is "to convey everything to the listener so that he remembers it not as a story he heard but as something that happened to himself." Hemingway.



Changing Needs in Education and Training: Evidence-Based Medicine

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- Evidence-based medicine is the systematic, scientific and explicit use of current best evidence in making decisions about the care of individual patients.

Evidence Based Medicine

The Problem

- Many health personnel are operating with old information
- Textbooks are out of date
- Journals are disorganized and limited
- There is just too much information out there
- Time is limited

What Makes Us Change an Established Practices



- Education and training
- Experience
- Expert opinion
- Evidence
- Expectations

Changing Needs in Education and Training : Evidence Based Medicine

Harshad Sanghvi MD
Medical Director, MNH Program
JHPIEGO



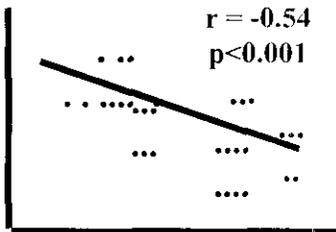
Why Change the Way We Practice?

- Morbidity and mortality rates are stagnant and in some places have gone up
- Increased access to evidence
- Many new technologies introduced without clear evidence of benefit
- Changing expectations of women



© 2006
JHPIEGO

The Slippery Slope



CEBM web site:
<http://cebm.jr2.ox.ac.uk/>



PREVIOUS PAGE BLANK

Evidence Based Medicine



The integration of

- individual clinical expertise
- best available external clinical evidence from systematic research
- patient's values and expectations

Archie Cochrane 1979



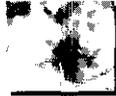
"It is surely a great criticism of our profession that we have not organised a critical summary, by specialty or subspecialty, adapted periodically, of all relevant randomized controlled trials."

Quality of Evidence

- I. Evidence obtained from at least one properly designed RCT
- II-1. Evidence obtained from well designed controlled trial without randomization
- II-2. Evidence obtained from well-designed cohort or case control studies, preferably from more than one center or research group
- II-3. Evidence obtained from multiple time series with or without intervention
- III. Opinion of respected authorities.

Research synthesis

- The results of a particular research study cannot be interpreted with any confidence unless they have been considered together with the results of other studies addressing the same or similar questions
- Research synthesis is the process through which two or more *research studies are assessed with the objective of summarizing the evidence relating to a particular question.*



Macmillan
Nursing
Faculty



Patient with desired characteristics

SORTED

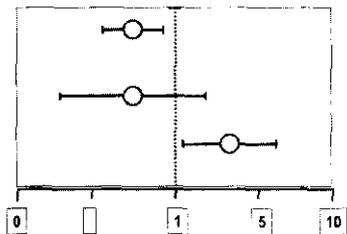
A Treatment
Prevention
Diagnostic method

B Alternative treatment,
prevention
or diagnostic method
vs placebo

Macmillan
Nursing
Faculty

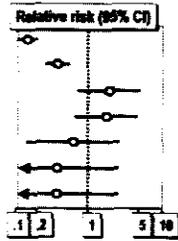
Relative Risk

Protective effect Deleterious Effect



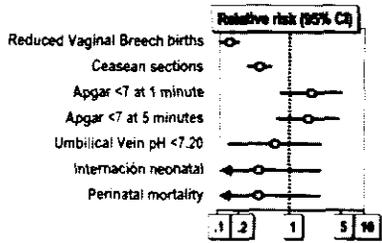
Macmillan
Nursing
Faculty

6 Studies 712 patients



External cephalic
Version > 37 weeks

6 studies 712 patients



Obstetric Practices Survey

- Survey of mid and upper level obstetricians, mostly faculty
- LAC : 8 countries 1520 responses
- Asia: 7 countries, 1690 responses
- Africa: 9 countries, 1423 responses

Current Practice:
Active management of third stage

	Asia	LAC	AFRICA
Only for those patients at high risk of PPH	42	53	23
For all vaginal births	68	46	34

Source: Sanghvi, 2002



Resources

- The Cochrane library
- WHO Reproductive health library
- Reproline: <http://www.reproline.jhu.edu>



Changing Needs for Training and Education

	Traditional	Changing need
Knowledge	Static, finite, linear, private	Dynamic, public, multidimensional
Learning	didactic	interactive
The teacher	"sage on the stage"	"guide on the side"
The student	Homogenous, "empty vessel"	diverse
Curriculum	Historical model	Outcomes model (competencies for a job)
Assessment	Reproduction of facts	Demonstration of skills, analytical ability
Evaluation	Teacher focused: what is being provided	Lerner focused: are learner needs being met

Adapted from Fisher, Stearns, (October 2001)



Educating for Capability

- Traditional education and training: competence
 - Focus on enhancing skills (knowledge, skills, attitudes)
- New education challenges: capability
 - Adapt to change
 - Generate new knowledge,
 - Continuously improve performance

Fraser, Greenhalgh, BMJ October 2001

Maternal
Neonatal
Health

Educating For Capability

- Capability is enhanced by
 - Feedback on performance
 - Challenge of unfamiliar contexts
 - Use of non linear methods
 - Small group discussion
 - Problem based learning

Fraser, Greenhalgh, BMJ October 2001

Maternal
Neonatal
Health

Educating for Capability

- Focus on
 - Support learners to determine
 - Personal learning goals
 - Receive feedback
 - Reflect
 - Consolidate
- Avoid
 - Rigid goals
 - Prescriptive content

Maternal
Neonatal
Health

Elements of Effective Teaching and Training

- Faculty and trainers with up-to-date clinical knowledge and skills
- Faculty and trainers with effective classroom and clinical training skills
- Strengthened clinical training sites
- Effective learning materials for faculty, trainers and learners

May 2010

The Future Educator and Trainer



Not a "sage on the stage"

....But a

"Guide on the side"

May 2010
