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## **MODULE 2**

### **Diagnosis of Training Needs**

221.606 - Training Methods and Continuing Education for Health Workers

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## **2.1 Recruitment and Involvement of Trainees**

### **2.1.1 Establishing Criteria for Selecting Trainees**

Trainers may not always have a direct say in who participates in a training programme. When a general invitation goes out, for example to local government health departments to send people for a training programme there may be internal formal and informal criteria already at work that influence the selection process. Formal criteria may be spelled out by the establishments or personnel department in terms of who is eligible to attend a programme based on the number of years of service or years since last attendance at a workshop. There may be programmatic issues wherein heads of departments may consider who on the staff is most likely to benefit from and use the training for the benefit of the department. Finally, there are often informal, unstated and personal issues such as seniority and “whose turn is it to go.” Since training often involves receiving allowances either from the training organization or from the employee’s own organization, attendance at a training programme is often valued more for the potential financial gain than any gain in knowledge or skill.

Ultimately, the ‘wrong’ people sometimes attend workshops. They are ‘wrong’ in the sense that they may not be motivated to learn, may not likely share what they have learned with colleagues and may not put into practice what was presented at the workshop. There are several things trainers can do to prevent inappropriate trainees from attending, although no system is fool-proof. Here are some examples:

- Spell out very clearly in all promotional literature the desired qualifications of potential trainees and what the trainee is expected to do upon returning to work.
- Communicate well in advance with organizations and agencies that will be sending trainees so that the management develops a personal interest in the course and a successful performance of anyone it sends for training. Work with the management to make training selection a joint process between the trainers and the agency sending trainees.
- Make it clear that trainees must apply for a place in the course and that their applications will be screened. Spell out the criteria for screening and selection.

### **2.1.2 Recruiting Volunteers**

A number of health programmes use community volunteers as a way of enhancing community participation in the planning and delivery of primary health care services. These may vary from village health workers (VHWs), community directed ivermectin distributors or adolescent peer educators. While volunteers work together with agency staff in delivering health services, the volunteer must always remain part of and accountable to the community or group from where he/she comes. Otherwise the volunteer loses recognition as a peer in the community and is seen simply as an extension of the agency. This affects his/her ability to community with and be accepted by his/her friends and neighbors.

Therefore, the selection of volunteers should be done primarily by the community. The trainer takes the role of facilitator and guides the community to determine its own selection criteria. The facilitator also explains the job description of the volunteer and the important role

the community maintains in supporting the work of the volunteer. Community members themselves often come up with the follow criteria themselves:

- someone who is well liked and respected
- someone who is stable (possibly someone who is married and not likely to leave family)
- someone who is educated in the local language

Sometimes communities have unstated criteria that affect the performance of their volunteer. People in Akintaro village selected John as their VHW using the above set of criteria. After some months the villagers complained to the training/supervisory staff that John was performing well. He was not quick in responding to their children's illnesses and he rarely called a village meeting to discuss what he had learned or to help the village plan for health action. The trainers asked the villagers to tell them more about John.

John had actually finished high school. He had tried to find work in Lagos, but returned after a couple years with nothing to show for it. He tried to study again for his school certificate exams so that he could further his education, but after three failed attempts gave up. His father convinced him to start farming in the village, which he had been doing for the past 10 years. It turned out that the villagers pitied John and thought that the village health worker course would give him a new career opportunity.

It was clear that the villagers did not appreciate the seriousness of the VHW's work and the need for a dedicated and intelligent person to volunteer. The villagers held a meeting and eventually selected a replacement for John. The trainers themselves learned that they needed to give better explanations about primary health care work before expecting communities to chose an appropriate trainee.

### 2.1.3 A Training Committee

In 1990 training was organized for patent medicine vendors (PMVs) in Igbo-Ora, a town of about 50,000 people that itself had over 50 PMV shops. Potential trainees consisted of the shop owners and their clerks/apprentices. The PMVs had their own professional association that met monthly. The trainers booked an appointment at one of the association meetings and explained the possibility of organization a training programme on basic primary health care knowledge and skills such as management of malaria, diarrhoea and sexually transmitted infections. The PMVs liked the idea. The trainers insisted that the programme be a joint activity, with the association taking major responsibility to ensure the success of the training.

Five association members were selected to serve on a training committee together with the trainers who included staff of the local health centre. The secretary of the association was one of the committee members and served as secretary to the committee also.

Prior to the first committee meeting, the PMV members canvassed the association membership to learn about their training interests. These topics included - cough, malaria, convulsions, guinea worm, gonorrhoea, diarrhoea and vomiting, snake bite and rheumatism. They said that these reflected the common problems brought to them by their customers. Based on readings and interviews with key informants, the trainers suggested additional topics including the essential drug list, pharmacy law, drug storage and shelf life, nutrition, medication counseling and interpretation of a doctor's prescription.

Because the association had decided to limit the training to 8 weekly 2-hour sessions, the list had to be narrowed. The committee prioritized the topics to include the following: malaria (including febrile convulsion), diarrhoea, guinea worm, gonorrhoea, cough, malnutrition, medication counseling and reading prescriptions. This list was presented to the next association meeting and was accepted.

Once the topics were finalized, the trainers assembled resource materials. The committee agreed to solicit funds from the association to have the materials typed and copied so that each trainee could have a copy as handout materials. During the training, the committee members were the first to come to the venue, a local primary school. They arranged the chairs and ensured that there was chalk. They helped take attendance and when trainees were absent, committee members follow-up to find out what was wrong and encourage them to attend the next session. Committee members took part in review and evaluation sessions.

**P** **Primary care training for patent medicine vendors in rural Nigeria.** Oshiname FO, Brieger WR. *Soc Sci Med* 1992 Dec;35(12):1477-84.

The provision of essential drugs and the involvement of various potential and existing health care providers (e.g. teachers and traditional healers) are two important primary health care strategies. One local group that is already actively supplying the medication needs of the community is the patent medicine vendors (PMVs), but the formal health establishment often views their activities with alarm. One way to improve the quality of the PMVs' contribution to primary care is through training, since no formal course is required of them before they are issued a license by government. Primary care training was offered to the 49 members of the Patent Medicine Sellers Association of Igbo-Ora, a small town in western Nigeria. Baseline information was gathered through interview, observation and pre-test. A training committee of Association members helped prioritize training needs and manage training logistics.

Thirty-seven members and their apprentices underwent the 8 weekly 2-hr sessions on recognition and treatment (including non-drug therapies) for malaria, diarrhoea, guinea worm, sexually transmitted diseases, respiratory infections, and malnutrition, plus sessions on reading doctor's prescriptions and medication counseling. The group scored significantly higher at post-test and also showed significant gains over a control group of PMVs from another town in the district. The Igbo-Ora experience shows that PMVs can improve their health care knowledge and thus increase their potential value as primary health care team members.

## **2.2 Diagnosing Training Needs**

from WHO Supervisory Skills Modules for the Programme for the Control of Diarrhoeal Diseases

### **2.2.1 Key Questions**

- P What tasks do the workers have to do (job description); have their tasks changed recently?
- P Are the workers actually practicing their assigned tasks?
- P What do the workers already know about their tasks; what skills do they already possess?
- P Where do the workers need extra help and input to perform their tasks?
- P What tasks are workers unable to perform because they do not know what to do or

- do not have the necessary skills?
- P What are the workers' attitudes toward their assigned tasks?
- P What is the ideal (standard) way that workers' tasks should be performed?
- P What do clients expect from the workers; are they able to perform to clients' expectations?

## 2.2.2 Task Analysis

Below is a sample list of tasks that a nurse in an outpatient children's clinic would be expected to perform concerning oral rehydration:

1. Prepare ORS solution
2. Assess presence of signs of dehydration
3. Ask mother/care-giver about the child's condition
4. Determine extent of dehydration
5. Develop appropriate treatment plan
6. Treat patient according to plan
7. Refer cases on severe dehydration to hospital
8. Treat or refer for other problems, e.g. dysentery
9. Record data of patient in register
10. Compile data on monthly basis and submit on report forms

Why Task Lists are Important -

from: Teaching Health-care Workers  
by F Abbatt and R McMahon, World Health Organization, 1985-1991

It is important to write down in some detail what the job actually is. The way to do this is to write down the job as a list of tasks. Tasks can be grouped under headings such as water supply, sanitation, curative care, maternal health, etc. For example, under the heading of water supplies, one might write the following tasks:

- 1) prepare a map of the district showing all sources of water
- 2) test water to determine whether it is suitable for drinking
- 3) build protection for springs
- 4) encourage communities to dig wells
- 5) teach communities how to dig and maintain wells, etc...

The essential feature of writing down tasks is that the tasks should be described as things that the health worker really does rather than simply a list of subjects or topics. A topic such as "suitability of drinking water" does not say how the health worker will go about this, but "build protection for springs" does spell out action to be taken.

Tasks can be further developed by spelling out the competencies and steps involved as seen in the next table from US Peace Corps Programming and Training Systems Manual

Task	Competency	Steps
The Village Volunteer will construct basis water supply systems	1. Construct a roof-to-barrel water catchment system which works	1. Identify and collect needed materials and tools locally 2. Draw a workable design on paper 3. Construct the system
	2. Construct a water purification system from local materials	

### Steps and Manner of Task Performance

Steps in Task 1: example of preparing ORS solution	Indicating how tasks should be done
<ol style="list-style-type: none"> <li>1. Wash hands with soap and water</li> <li>2. Pour all the powder from ORS packet into a clean container</li> <li>3. Measure 600 ml of clean drinking water into the container.</li> <li>4. Mix well until the powder is completely dissolved.</li> <li>5. Store the ORS in a clean, covered container</li> <li>6. Throw away any solution that remains at the end of the day</li> </ol>	<ol style="list-style-type: none"> <li>1. <i>Manner</i> - the nurse will ask the mother about the child's condition <i>in a friendly tone of voice</i></li> <li>2. <i>Quantity</i> - the nurse will <i>measure 600 ml of water using 1 beer bottle or 2 soft drink bottles</i></li> <li>3. <i>Accuracy</i> - the nurse will measure the water <i>to the nearest centilitre</i></li> <li>4. <i>Speed or Timeliness</i> - the nurse will begin administering ORS <i>within 5 minutes of the child's arrival in the clinic</i></li> <li>5. <i>Completeness</i> - the nurse will enter <i>all requested data on the child's form</i></li> </ol>

### Making a List of Tasks:

- 1) Think about the work that will actually be done by the trainees when they return to work.
- 2) Improve the list by reviewing existing curricula, job descriptions and technical literature.
- 3) Improve the list by comparing it with what the community needs and the local culture. Seek community input on these needs and on their views of health worker performance.
- 4) Improve the list by observing what health workers actually are doing on the job and by talking with them about their work.

Task Analysis consists of - - -

- K examine the task carefully in the context in which it is expected to be performed
- K sub-divide the task into various components - sub-tasks, competencies or steps
- K decide what skills are needed to perform each task and step
- K decide what knowledge and attitudes are needed to carry out each task and step

(From Abbatt and McMahon, WHO)

TASK: repairing a pump for a village well	Enabling \$ Factors	Attitude	thoroughness and carefulness
		Knowledge	how a pump works, what parts are involved, how and where to order parts
	Performance \$ Skills	Communication	explaining to the community about the need for repairs and how to contribute to costs
		Decision Making	determining the fault that needs repair, deciding what new parts are needed
		Manual Skills	assembling the parts of the pump and testing to be sure it works

Summary of Enabling and Skill Factors Needed to Give Tablets to the Mother of a Sick Child -

1. **Knowledge** of the names, dosages, side effects of the drugs and ways to give it to the child correctly
2. **Attitude** of friendliness and patience toward the mother
3. **Communication** with the mother to explain the drugs course and to seek feedback to ensure she understand
4. **Decision Making** to determine the dose
5. **Manual Skills** to count out the tablets and package them

Details on the steps needed to carry out this task and the skills needed for each step in the task of giving tablets are summarized below:

Steps	Knowledge	Attitude	Communi- cation	Decision Making	Manual
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explain to the mother that she will demonstrate how to give medicine to the child		T	T		
smiles and talks to the child		T	T		
asks the mother to position the child			T		
checks the prescription	T				
checks the label	T				
determines the dose based on age, weight				T	
asks the mother to open the child's mouth			T		
measures the medicine					T
gives the medicine					T
asks the mother to close the child's mouth			T		
records on chart	T				

### 2.2.3 Methods for Determining Training Needs

Several general methods for gathering data on training needs exist. These can be grouped broadly under three headings, 1) interview, 2) observation and 3) documentation. Some examples follow:

- 1) Interview
  - a) in-depth, open-ended interviews with employees, employers and clients
  - b) questionnaire - structured format to obtain opinions of employees
  - c) tests - specific questions on job knowledge and skills
  - d) focus group discussions among employees and clients
  - e) group problem analysis - specific discussions among employees around a work site issue that needs to be addressed
  
- 2) Observation
  - a) watching employees perform tasks and using a checklist to compare with standard
  - b) watching the flow of service
  - c) observing the interaction between employees and clients
  - d) using checklists to determine availability of supplies, equipment, etc.

- 3) Documentation
  - a) review of job descriptions to determine expectations and standards
  - b) reading progress, monthly, annual reports of the organization and by individual employees
  - c) reviewing minutes of meetings
  - d) compilation of complaints, grievances, accidents
  - e) reviewing records on employee movements - absenteeism, sick leave, turnover, etc
  - f) reading professional and research literature and technical reports showing new developments in the field
  - g) reviewing new policy documents for implications for job description/tasks

Use a Variety of Techniques ....

from: Determining Training Needs, by: Richard B. Johnson  
Consolidated Natural Gas Company, Pittsburgh, PA, USA

Determining training needs is a process of finding out what is happening now concerning job performance in an organization and comparing that with what should be going on. The gap, if any, gives clues to the kind and amount of training needed.

### Analysis of an Activity (Process, Job, Operation)

One way to increase productivity is to keep to a minimum the number of steps which must be taken to produce a product or service, then make sure each step is handled with at list amount of time, effort, and money. The procedure is simple:

1. List as steps in a logical sequence the activities involved in producing a product or service, or part thereof. This calls for great attention to detail. Don't miss a single work, movement, or storage point. Review your material on work simplification.
2. Question each step ruthlessly. Is the step still needed? Can it be simplified? Is a new machine or less expensive material or a new process or procedure available? Under the impact of the creativeness of those concerned, what activity can change from time to time? These changes can produce training needs. What new knowledge or skill is called for? Should present knowledge or skill be modify? If so, to what extent, when, and by whom?

### Analysis of Equipment

A new piece of equipment or modification of present equipment may call for new skill, knowledge, or understanding on the part of the foreman and/or operators. Therefore, get answer to questions such as these:

1. In what ways will the new or present equipment be different?
2. What new skills and knowledge will be needed?
3. Who will need it?
4. When will they need it?
5. What new attitudes may be desirable for all concerned?

The answer to these and related questions will provide clues to training needs. Incidentally, these answers can come from several sources, not only the supervisor.

## Analysis of Problems

Clues to training needs can come from an analysis of an operating problem. The problem. The problem may have emerged in part because an individual or group didn't know enough, didn't have enough skill, or didn't have the necessary understanding to handle a specific challenge at a given moment in a specific situation. To analyze a problem for training purposes, just ask some questions. Among the best we find our six faithful friends: what, why, who, when, where and how. What, exactly, is the problem? Why is it a problem? Who is involved? When was it triggered? What kind of knowledge was missing-what kind of skill, what insight or attitude? What should be done so that the problem (or one like it) can be handled properly if it reappears? Who should get additional knowledge, skill, or insight? When should they get it/ Who should give it to them? Where should it be given? What kind of follow-up should be conducted?

When analyzing a problem for training purposes, the thinking and suggestions of others can be helpful. Seek this help. It's good insurance for you and can increase the value of the eventual solution. However, weigh all ideas carefully, for training may not be the best solution in a given situation, even though some of the people involved may feel it is. Instead, better day-to-day supervision on the job, for instance, may be the answer.

## Analysis of Behavior

Clues to training needs can come from an analysis of a typical behavior by individuals or groups. Chronic absence, spoilage of work, carelessness accidents, irritability, contentiousness, resistance to direction, resentment toward instruction, etc., are symptoms of conditions which may call for corrective action involving training. A manager, for instance may need to be a better a planner, or communicator. A group may need to know more about policy, and so on.

## Analysis of an Organization

Poor organization can affect individual and group performance. Failure to meet goals, confused planning, sloppy delegating, weak discipline, capricious rewarding, unclear goals, absence of standards of performance, favoritism, uneven work load, etc., can lead to low morale and marginal organizational performance. Note that the presence of these or other weakness can produce some of the patterns of individual and group behaviour listed above. An analysis of these weakness can produce clues to training needs, both individual and group.

## Appraisal of Performance

Appraisal of performance actually goes on constantly. The boss appraise his subordinate; the subordinate appraises himself; others quietly appraise both boss and subordinate. Often this appraisal is casual, subjective, and unrecorded. It may not even be discussed. Yet each such appraisal can end with a recognition of a training need. Someone should "get" something be it additional knowledge, skill, or understanding.

To improve productivity, organizations increasingly are turning to programs of formal periodic appraisal of individual performance. A device developed and s procedure worked out. Standards of performance are use as a basis for measurement.

Whatever the device and procedure, one of the outcomes is an indication of the appraisee's growth needs. Some of these needs are training needs. The individual then can undertake self-development activities independently or through company-provided media, or both.

## Brainstorming

Some training practitioners find brainstorming a helpful way to determine training needs, especially of a group. The procedure is simple:

1. Bring together a homogeneous group (salesmen clerks, engineers, supervisor, executive, others).
2. Place in front of them on a blackboard or flip chart a question of common concern. Phrase it as a “how to” question.
3. Ask individuals in the group to call out any ideas they have for answering the question. Write these ideas on the blackboard or flip chart as fast as they’re called. Don’t be judicial. Don’t try to organize the list. All you want at this point are ideas. Announce a time limit, e.g., five minutes.
4. When time is up, examine the list. Identify items which call for additional knowledge, skill, or attitude. These are training needs. Note that some ideas may bear on other needs such as changes in organization, policies, and procedures. These are valuable clues to productivity improvement opportunities outside the training sphere.

## Buzzing

Buzzing is a group-dynamic technique used to tap the thinking of a group for possible solutions to a common problem, to develop a procedure, etc. It consists of dividing the audience into small groups of four or five persons. Each group chooses one of its members as chairman and another as recorder. At a signal each group starts to discuss the question at hand. The chairman keeps things moving. The recorder writes down all the ideas thrown out. At the end of the work period (ten to twenty minutes) the groups reassemble. Then the chairman of each group reports from his recorder’s list what his group has produced. Each item is written on a blackboard or flip chart. As the groups report, some items will be duplicated. These duplications are shown by adding a mark after the original statement. When all groups have reported, final ideas are added from the floor. Later the list is classified for further use.

Buzzing can be used to identify training needs. For instance, an audience of supervisors, managers, professional personnel, or others (as long as it is homogeneous) can be given a question such as, “What are desirable next steps in our training?” or “What additional areas of knowledge (or skill or understanding) do we need to handle our work better during the next project period?”

## Card sort

This is a forced-choice procedure. A batch of 3 x 5 cards (usually no more than ten) is typed up with a single job-related “how to” statement on each. Each statement is a potential training need. These cards are handed to the person whose ideas are sought. He arranges these cards in what he feels is their order of importance for him. If he feels a card should not be included at all, he leaves it out. If it is desirable to get leads from several people at a time, each is given an identical pack. For a group of supervisors, for instance, the cards might read: “How to plan”; “How to organize”; “How to assign work”; “How to write reports”; “How to delegate”; “How to understand the labor contract”; “How to train”; “How to stop tardiness”; “How to get more cooperation”; or “How to stop bickering.”

The arrangement of the cards gives clues not only to training needs, but to the order in which the sorter feels they should be met. If several people have arranged the cards, make up a chart showing the distribution of desires.

## Checklist

A job, process, program, activity, or area of responsibility is broken down into a list of detailed parts or steps arranged in logical sequence. A column to the right is provided for checks. A copy of this list is given to each person whose ideas are sought. He checks off the items about which he feels he would like to have more skill or knowledge. If several people are involved, their responses subsequently are plotted on a distribution chart. Thus training needs of the person or group are identified.

Lists of all kinds can be made. One for supervisors might include basic functions such as planning, organizing, operating, controlling, and their elements. One for salesman might include preparation for a call, presentation of the pitch, closing the sale, report writing, and their elements. One for budgeting might include preparation of assumptions, analysis of goals, allotting time units, pricing units, and their elements. The important thing is to be sure the items are work-related, so training needs can be shown in terms of skill or knowledge.

## Committee

An advisory committee composed of persons responsible for, or with a direct interest in, an activity can identify training needs with considerable accuracy. Some organizations have a companywide training advisory committee. Others may have a committee for each area of training--orientation, apprentice, sales, clerical, technical, pre-supervisory, management, executive. In some organizations each separate course has its own committee.

A training advisory helps the practitioner to analyze operating problems for training purposes, construct curricula, audit instruction, or evaluate results. The personnel of a training advisory committee should be selected carefully. Each member should have a personal stake in the success of the activity for which the committee is responsible. This suggests that a key manager (policy, relationships) and a top operator (subject matter authority) should serve. The training practitioner often is ex officio consultant. Other persons can be added as need indicates.

## Comparison

To increase company productivity, many organizations employ full-time training practitioners. These capable and dedicated men and women concern themselves constantly with ways training can help to solve operating problems. These operating problems stem from many specific situations. To meet these challenges (training needs) practitioners develop ingenious solutions. Frequently these solutions are shared with other training practitioners through the *Training and Development Journal*, training conferences, or other media.

By keeping in touch with these sources, a training specialist can compare what he's doing (or contemplates doing) with what others are doing or have done. He can learn about new ways to handle old problems, keep up to date on new techniques and procedures, fought his own obsolescence.

## Conference

A conference of persons concerned with an operating problem can identify training needs and make decisions on ways these needs will be met. Clearance, policy determinations, cost factors, and other elements can be worked out. Unlike a committee (which has continuity), a conference often in a one-shot affair.

## Consultant

The employment of outside consultants is another way to determine training needs and develop ways to meet them. Several management consulting firms provide this service. The selection of a consulting firm should be done with care. Names of ethical practitioners can be obtained from companies who already have employed consultants, from trade and professional associates, and from the American Society for Training and Development. Outside consultants use a variety of methods for determining training needs. Included are surveys, questionnaires, conferences, interviews, analyses of various kinds, studies, and observations. They also seek the opinions of the organization's training practitioner if one is available.

## Counseling

Counseling is often a discussion between a training practitioner and a person seeking guidance regarding ways he can improve his on-the-job performance or prepare for advancement. Outcomes may include agreements on what kinds of additional knowledge, skill, or understanding (insight) the counselee should seek. An especially fruitful counseling opportunity exists during the post-appraisal discussion between an employee and his supervisor. The appraisal has been work-centered. The discussion is dedicated to an identification of growth needs, and agreements on how these needs will be met.

Counseling itself generates a training need, for anyone responsible for the work of others, e.g., all managers, must coach and counsel them often. To do this satisfactorily calls for training in counseling techniques plus periodic refreshers.

## In-basket

The "in-basket" involves a training procedure which gets its name from the nature of the exercise. It is used to measure or test a manager's ability to handle some of the day-to-day challenges which come to him in writing from various sources. These challenges show up in his "in-box"--usually a box on his desk into which messengers, his secretary, or others place letters, memorandums, reports, notes, requests, directions, etc., for his attention. During an in-basket session, the participant is given a large envelop containing prepared in-basket items. During a time period (for instance, thirty minutes) he handles as many of these items as possible by writing on each piece of paper what he decides to do about the matter it contain. At the end of the time period, his decisions are discussed. Clues to training needs may emerge.

## Incident Pattern

Over a period of time, everyone's behavior fluctuates above or below his optimum level of performance depending upon how he handles emergencies or unusual challenges. Under the incident pattern, these responses to special situations are noted in terms of success or failure in each situation. At the end of a reasonable period, perhaps one year, this pattern of deviation is studied. If certain types of situations are seen to produce inadequate behavior, these can be analyzed to determine what additional knowledge or skill the individual needs to handle these situations successfully.

## Informal Talks

Within his organization, the training practitioner meets many people. He talks informally with most. Out of these dialogs may come clues to training needs which might not come to light in any other way. The practitioner must look consciously for these signals, for they may not be

loud and clear.

### Interviews

A training practitioner may feel training is needed in an organization unit. To get information, he arranges a formal meeting with the person or group concerned. In preparation for this meeting, he lists pertinent questions. At the meeting, he employs the interview technique. Referring to his list of questions, he asks each in turn, writing down the answers for future study. Other types of interviews (employment, transfer, promotion, etc.) are used in an organization. One quite helpful is the exit interview. During this “last task” a person leaving the company is in a position to suggest how things could be better. Some of these things may point directly to training needs.

### Observation

The training practitioner has freedom of movement throughout the organization. During his travels, he can observe many things. Some of these may have value as indicators of training needs, especially needs which are just under the surface, or emerging. He needs an alert and creative mind, good eyes, sharp ears and a discreet mouth.

### Problem Clinic

A homogeneous group meets informally to discuss a common problem and develop a solution. This solution may require training. For instance, if the problem is how to increase sales by 5 percent during the next quarter, the solution in part may be to give each salesman additional product knowledge (a training need).

### Research

Many companies, industry associations, universities, and other organizations conduct research constantly. Results may produce new products and materials, or new uses for present products and materials. As these new assets are phased into a company’s planning, implications for training and development emerge. The training practitioner, as one of the planning group, recognizes these implications and plans accordingly.

### Role Play

Role playing is a training procedure featuring two or more persons playing assigned parts or roles in a “playlet” simulating a real-life situation dramatizing a present or emerging problem (operating, communication, interpersonal relationship, etc.). How each role player handles himself under the press of the situation can give clues to his training needs in a skill, an area of knowledge, or in understanding or attitude.

### Self-analysis

All “good” people constantly evaluate themselves. They want to do their best. They set high standards for themselves. They are critical of their performance against these standards. They “know” what they need in the way of additional knowledge, skill, or insight. Given an opportunity to express these thoughts, as through a company program of formal periodic self-appraisal for growth purposes, they give direct clues to training needs. Where a number of people have this opportunity, a summary of their statements can reveal group training needs.

## Simulation

Simulation is also known as business or management gaming. Games are structured to permit teams of players (each taking a role) to compete with each other in managing a company, conducting a campaign, carrying out a function, or otherwise performing under conditions which demonstrate possession (or lack) of decision-making ability. Some games are designed to simulate several years of operation in a few of hours or days. Analysis of performance can reveal individual and/ or group training needs. (See management games).

## Skills Inventory

Some companies establish and annually update an inventory of the skills of their employee. Listed are the skills these employees currently are using on their present jobs, plus other skill they possess which have value for other jobs. This inventory permits flexible use of manpower, especially under expansion or reorganization. It also identifies gaps or blind spots in reserve or stand-by skills. This gap gives clues to training needs.

## Slip Writing

This is a technique used with groups especially at the last session of a training program. Each person is given a number of 3 x5 slips. A question is placed before the group: "I feel I need the following additional skill or knowledge about this subject," or "I would like the following related training," etc. At a signal, each person starts writing out his responses- one response to a slip. As soon as he writes one slip, he sets it aside and starts another. He writes as quickly as possible. He doesn't sign his name unless he wants to. A time limit is set, usually five minutes. When time is up, the slips are collected. Later the training practitioner classifies these slips. The result is an indication of training needs. It is also a check against the validity of the instruction already given. Slip writing can be used in many other ways. Similar to brainstorming, it can be used to structure procedure, solve problems, and so on.

## Studies

From time to time an organization, under the impact of its long-range planning, contemplates a change, it undertakes a study in depth of all ramifications. Such studies can turn up training needs which will have to be met if the plans are adopted. Similarly, studies sometimes are made of present operations to identify ways productivity can be increased. Results may identify training needs calling for immediate action.

## Surveys

Surveys can be used to take inventory of operations, employee attitudes, implications of advanced planning, etc. Like studies, surveys can be delimited to a part of the organization, or can be companywide. They can be focused on a single activity, or beamed at a combination of activities. Like studies, they are mounted only after a felt need exists for the information they will produce, for surveys are costly to mount. Part of the findings of a survey can identify training needs. Surveys often are one step in a study sequence.

## Tests

Testing is a well-established method of determining training needs. Tests can measure skill or knowledge. Some even are said to measure attitude. Tests can require a performance response (the manipulation of tools, materials, or equipment) or can require a written or oral



response. Results indicate gaps, if any, in the testee's skill or knowledge, thus suggesting training needs. Among written tests, many feel the objective type is best. This is forced-choice media, requiring the testee to underline a word or phrase, circle an item, write in a missing word, and so on. They are easy to administer but challenging to compose. (See psychological testing).

### Task Force

A small group of selected personnel, usually two to three, is relieved of regular duty to spend full time solving an assigned problem. In analyzing the problem, the task force may unearth training needs which must be met before their recommended solution to the problem can be implemented. Their final report identifies these training needs.

### Questionnaire

Webster defines a questionnaire as "a written or printed form used in gathering information on some subject or subjects consisting of a list of questions to be submitted to one or more persons." The questionnaire is a well-accepted method of determining training needs. Each question is brief; each is specific; each is phrased to get a short answer; each is designed to elicit information which can be used to determine training needs, delimit the scope of the training, identify course content, etc.

A copy of a questionnaire is given to each person invited to help determine training needs. He writes out his answers to the questions and returns the completed questionnaire to the training practitioner or to the chairman of the training advisory committee.

Responses on the questionnaire are studied. If several questionnaires have been distributed, a summary of responses is made. The pattern gives clues to training needs.

### Workshop

The workshop involves a technique which brings a group together to develop further skill through actual practice in a management function such as planning or report writing. As the group pursues its workshop goal, there may emerge evidence of individual and group needs for further training. While these needs fall most often into skill or knowledge areas, need for further understanding or insight about organization goal or operations may be indicated.

### Other Ways

There are many other ways to determine training needs. The training practitioner will devise them to meet specific situations. The terminal objective is to determine what additional skill, knowledge, or understanding an individual or group needs to be more productive.

## SOURCES OF TRAINING NEED INFORMATION

Clues to training needs can come from a number of written *Sources*. Even such sources as complaints, requests, suggestions, while usually oral at first, should be reduced to writing if they are to be used as a basis for determining training needs. The discipline of writing makes the information more precise and useful, and of course official. Some of the methods described earlier produce written sources--studies and surveys, for instance. However, for our purpose here, we consider written materials *already* in existence

## Articles

Business and professional publications carry articles dealing with many aspects of free enterprise, from research through production to marketing, plus space given to events and trends in the supporting staff activities. Often these articles deal with personnel utilization, from research in the behavioral sciences to ways companies improve productivity through training and development activities of various kinds on all levels. Reading these articles can give the training practitioner clues to training needs in his organization as he learn what others are doing or have done about problems similar to ones his company has, or could have. Learning what other companies have done or are doing may lead the practitioner to say: "This is something we should look into." Thus, for instance, has programmed instruction spread. In this sense, reading articles can give the training practitioner clues to training needs in his organization. A gold mine of such material is found in the *Training and Development Journal*.

## Books

A traditional source of ideas, books increasingly are becoming available in the field of personnel utilization. Titles range over a wide spectrum of subjects, from applications of the results of research in the social and behavioral sciences to management functions. Some of these books report examples of successful experience with applications of training and development techniques and procedures in improving productivity by solving growth needs of individuals and groups. Through transposition and implication, these report can identify clues to training needs in any organization and suggest solutions through adaptation. Because of the time it takes to write and publish a book, the content may lag somewhat behind the content of articles in magazines. However, *good* authors carefully research many sources, including current journals.

## Case Studies

Structured to challenge a learner to solve a case or problem situation carefully described in writing, analysis of a case and the development of possible solutions to the problem it presents can reveal gaps in a person's skill or knowledge or understanding (insight). These gaps are training needs. Many cases are available from commercial sources. Some companies develop their own to meet specific situations unique to their own environment.

## Complaints

From time to time in any organization individuals or groups can feel something just isn't right. The dynamic nature of work makes this possible. Often this restlessness or dissatisfaction takes the form of complaint. Some of these complaints are verbal, some written. Analyzing these complaints can reveal needs for additional skill, knowledge, or understanding on the part of individuals or groups. In short, they identify training needs.

## Crisis

A crisis in the operation of an organization or one of its units often subsequently reveals training needs. What caused the crisis? Was it poor planning, lack of coordination, cloudy areas of responsibility, unwarranted assumptions of authority, breakdown in communication, inadequate control, personality conflicts, or any of the many other things? These or other causes can indicate training needs.

"Maydays" for help come unexpectedly, arrive from out of the blue, and generate heat and vibration. Some organization, or units within, seem to have them often. Others don't seem to

have them at all. The difference may be, in part, effective advanced planning--including the provision of adequate training in planning, organizing, controlling, and other function for individuals or groups.

### Experience of Others

By others we mean especially other training people. Many of them have conducted and are conducting corrective and preventive training of all kinds, on all levels, in all units of numerous organizations. They have used many ways to become aware of these training needs. They are happy to share their experiences. Many do share through the ASTD institutes, the national conference, and the *Journal*. They also share through correspondence and in other ways. Save yourself a lot of time and energy by tapping these sources. Also contribute your own thinking and experience through authorship. Experience of others in determining training needs can enrich your own.

### Factual Data

Clues to training needs can be found in the many kinds of factual data at hand in every company. For instance, the employee relations department will have information on absenteeism, turnover, grievances, overtime, or accidents. Production will have statistics on costs, work rejects, work schedules, production activities, service calls, waste, rework, maintenance. Research and development, sales, engineering, legal, finance, public relations and other departments will have their own particular data.

These data record conditions as they exist. They also help to indicate trends. Analysis will yield information about "why." This information can show what kind of additional knowledge, skill, or understanding may be needed by individuals or groups, i.e. training needs.

### Grievances

Many companies, especially those with unions, have formal procedure through which an individual or group may bring to management's attention any condition or problem they feel exists to the detriment of all concerned. An analysis of these written grievances may indicate training needs, especially in aspects of supervision, administration of policies, or operating procedures.

### Plans

Plans are a constant source of clues to future training needs. Long-range plans reveal needs permitting adequate preparation, i.e. long-range training planning. Here preventive can be done. Short-range plans reveal needs requiring more immediate action, even corrective training. The training man must know of these long-range and short-range plans. Properly, he should have a part in the planning itself. The best plans will fail if they're not implemented by adequately trained and motivated people.

### Policies

New policies about to be introduced and old policies which are being revised can pose problems of communication or performance standards. Before implementing these policies, additional skill, knowledge, or understanding may be needed by those concerned. If so we have training needs.

## Records

A type of factual data, records of costs, work reject, waste, service calls, accidents, absenteeism, overtime, and turnover can reveal clues to training needs. Incidentally, these needs may not be limited to persons directly responsible for deviations from standards. The real villain may be on the level above, i.e., inadequate supervision. The training practitioner must look beyond the record itself.

## Reports

As another type of factual data, reports usually are more narrative and detailed in style than typical statistical records. Reports can reveal training needs, but the training practitioner may have to dig for clues. Regular reports, such as those on production, sales, and performance, may require less digging than special reports on organization development, product development, research, and market development.

## Requests

Requests for training can be informal (usually oral) or formal (usually written). Requests, especially from management sources, simultaneously identify training needs. Requests sometimes follow a crisis or come just before a crisis seems imminent. Thus corrective (fire-fighting) training is mounted. Requests also may come as a result of advanced planning in an organization unit. Problem of implementation can be anticipated. Thus preventive training to get people ready can be designed.

The prudent training practitioner will insist upon written requests, properly cleared. He then will validate the request in his own mind before taking action. If after his examination, a request seems marginal, he will discuss this conclusion with his superior. The problem generating the request might be solved better in some other way. However, if the "request" is an order, the training practitioner moves immediately.

## Rumor

A high-speed, sometimes accurate (some feel clairvoyant) source of information, the organization grapevine can give the tuned-in training practitioner clues to training needs which otherwise might never come to light. The grapevine or rumor mill among other things is a feedback medium. It reflects reactions of individuals and groups to past, current, or anticipated events viewed as affecting them personally in real or imagined ways.

Some of the information carried on a grapevine has pleasant connotations. It contributes to proprietary interest in the organization. Other information can cause needless worry and tension. Rumor fly fast. Absent of adequate knowledge about a proposal, or lack of understanding about a current policy or activity can affect morale, dissipate effort, create conflict, and otherwise reduce productivity.

An analysis of negative grapevine information usually reveals someone did inadequate planning, control, and/or communication. Training needs here are partly with those persons whose action or lack of action led to the situation which created the rumor.

## Statements

From time to time management, employee organizations, and responsible individuals make formal statements in meetings, from the platform, or in company or other publications. Read closely, these statements can suggest training needs, even though obliquely. The alert

training practitioner will catch these “straws in the wind” and project their implications.

### Suggestions

Different in a sense from requests or statements, suggestions regarding training needs may come to a training practitioner informally, even spontaneously. They even may be framed as a question. Yet they are direct signals that someone feels a training need exists. Some companies maintain a “Coin-Your-Ideas” or other formal program which encourages employees to make suggestions for the good of the enterprise. Some of these suggestions, the training practitioner can ask for suggestions, especially from foremen, supervisors, and other leaders.

### Symptoms

Any perceptible change in the function of an organization unit, in the behavior of an individual or group, in the environment of an activity may be symptomatic of needs which might be met in part through training. Thus clues to training needs may be revealed through an analysis of such symptoms. Negative symptoms sometimes stem from misunderstanding of policy changes or from plans initiated without adequate prior communications.

### Other Sources

Many other sources can be used to determine training needs. The training practitioner will select these as required. The terminal objective is to get as much information as possible bearing on the needs of an individual or group for additional knowledge, skill or understanding.

### More Information on Understanding the Trainee’s Job as a Basis for Assessing Needs

### The Job Specification

The content and organization of a job specification, like that of the job description, will vary among companies. Generally, however, the items covered by a job specification may be divided into two groups: one group covering the skill requirement of a job and the other group covering its physical demands.

### Skill requirement

The skill requirement include the mental and manual skills as well as personal traits and qualities that the job holder must possess to perform the job satisfactorily. Although a job specification may not contain each one of the following skill requirements, it generally all contain most of them.

1. **Educational requirements.** These requirements may include the minimum formal education, including special courses or technical training, considered necessary to perform the job.
2. **Experience.** The minimum amount and type of experience that is required in order for an employee to hold a job generally can be expressed in objective and quantitative terms such as years and months.
3. **Specific knowledge requirements.** Many jobs require the employee to possess specific

knowledge that cannot be covered adequately by the education and experience specifications. These requirements might include a knowledge of certain materials, processes, equipment, systems, products, or other subject matter.

4. **Personality requirements.** These requirements often are the most difficult to describe because they are intangible and subjective in nature. Nevertheless, the ability of an individual to fit into a particular situation tend to work harmoniously with others may have a much greater bearing than does his technical skill upon his success in performing a particular work. Information relating to these qualifications may cover such topics as social skills, judgement, initiative, cooperativeness, and creative ability.
5. **Responsibility.** Most specifications cover this qualification as a separate requirement because it is likely to include several types of responsibility. These types may include responsibility for the work of others, for equipment, for production processes, for company funds, for product quality, for safety, and for cost reduction.
6. **Manual skill requirements.** In the case of some jobs, manual skills can be covered in the items describing experience and training. For other jobs, however, manual skills may have to be defined in terms of quantity, quality, or nature of the work to be performed, or in terms of the minimum scores that must be achieved on certain performance tests. Manual skills include clerical skills, such as typing, and shop skills, such as those that are required in order to make a pattern or a jig.

### **Physical demands**

The physical demand of a job may include: (1) physical exertion, (2) working conditions, and (3) hazard that are encountered in performing the duties of the job. These demands are likely to be greater for shop jobs than for office jobs.

1. *Physical exertion.* Physical exertion covers such activities as walking, stooping, lifting, handling, or talking. It includes not only the amount of physical efforts to perform a job but also the length of time during which such efforts must be expended. A summary of the weights, pressures or other quantitative measures of the exertion required can help to indicate the extent of the physical demands that are necessary.
2. *Working conditions.* This portion of the physical demands section pertains to the general physical environment or surroundings under which the job must be performed. It may indicate, for example, whether the lighting is adequate, whether the work is isolated, and whether the conditions are hot, cold, dusty, or cramped.
3. *Hazards.* The listing of unfavorable working conditions and hazards can help to call attention to them and encourage their elimination, and thereby contribute to employee health and safety. Certain jobs may remain hazardous in spite of all safety measures that can be taken. The specifying of hazards can help to insure that those persons who are placed in the hazardous jobs will have the mental and physical qualifications necessary to perform the work safely.

## **2.2.4 Facility Needs Assessment**

In the late 1980s and early 1990's the US Center for Disease Control and Prevention (CDC) under a US Agency for International Development (USAID) project called African Child Survival Initiative developed plans to establish continuing education units (CEUs) in many of the State Ministries of Health in Nigeria. These CEUs were responsible for training local government are (LGA) health staff in basic child survival programming skills such as organizing immunization programmes, establishing oral rehydration units and maintaining good clinic records. Although there were a number of training modules on these topics available from WHO, UNICEF and the Federal Ministry of Health, the CEUs were encouraged first to find out what was happening on the ground before inviting participants for training. In this way the training modules could be adapted to the real needs of the LGA staff and also have a baseline for evaluation of change in performance after the training.

To this end, they developed a “facility needs assessment checklist.” Using the checklist, CEU staff observed staff at work, the availability of clinics supplies and materials, and the flow of patients among other factors. They also interviewed clients to determine what they had gained from their clinic visit. A sample of the items from the checklist are found below. Similar checklists could be developed for any clinic activity or programme from family planning to guinea worm eradication.

State	Local Government		
Clinic	Cadre of Staff		
<b>Question</b>	<b>Item</b>	<b>Yes</b>	<b>No</b>
(Observations of Sick Children Management)			
Does the health worker determine the child's ...	age?		
	weight?		
	temperature (using thermometer)?		
	temperature (by touching skin)?		
	respiratory rate?		
Does the child have an immunization card?			
Does the health worker ...	Check the child's immunization status?		
	Refer the child if immunization needed?		
Does the health worker ask about ...	General condition of child?		
	duration of illness?		
	history of fever?		
	history of vomiting?		
	history of diarrhoea?		
	duration of diarrhoea?		

<b>Question</b>	<b>Item</b>	<b>Yes</b>	<b>No</b>
	number of stools past 24 hours?		
	blood in stool?		
	coughing?		
	difficulty in breathing?		
	problems swallowing?		
Does the health worker ask about ...	History of home treatment with indigenous medicine?		
	history of home treatment with orthodox drugs?		
Does the health worker examine the child's ...	Eyes?		
	ears?		
	throat?		
	breathing?		
	abdomen		
	skin fold?		
Does the health worker diagnose the child as having ...	Diarrhoea?		
	dehydration?		
	cough?		
	cold/catarrh?		
	pneumonia/bronchitis?		
	malaria?		
	other? (Specify)		
Does the health worker explain to the mother ...	How to administer medications?		
	the importance of completing treatment?		
	the need to give more fluids than usual?		
	give more fluids after each diarrhoea episode		
	more fluids after each vomiting episode?		
	continue breastfeeding the child?		



<b>Question</b>	<b>Item</b>	<b>Yes</b>	<b>No</b>
	continue feeding the child?		
	how to prepare SSS?		
Does the health worker ask the mother ...	Questions to she if she has understood?		
	if she has any questions herself?		
(Exit Interviews for Mothers)			
Were any medicines were given/prescribed for your child?			
Which medicines were given/prescribed?	ORS		
	SSS		
	Chloroquine tablets		
	Chloroquine syrup		
	(etc.)		
(Mothers are then asked to state how much medicine for how many times a day for how many days they should give to the child)			
Did the health worker tell you to ...	Give more fluids than usual?		
	give fluids after each diarrhoea episode?		
	(etc.)		
Did the health worker greet you?			

Question	Item	Yes	No
(Checklist for equipment and supplies)			
Are the following available in the clinic?	Thermometer		
	weighing scale		
	scale in working order		
	immunization register		
	child health cares		
	timer (60 second)		
	watch		
	steam sterilizer		
	(etc.)		

## Strengthening patient education for ORT services in the Central African Republic.

Patient Educ Couns. 1996 Mar;27(2):161-9.

[Related Articles, Links](#)

Naimoli JF, Endsley S, Rongou JB, Parker K, Bryce J, Doutizonga R, Gbadjamo M.  
International Health Program Office, Centers for Disease Control and Prevention,  
Atlanta, Georgia 30333, USA.

This paper describes the design and implementation of a health worker training program in diarrhea case management and its effect on patient education in health facilities in the Central African Republic (C.A.R.). In 1989, a **facility-based assessment** of health worker practices in managing diarrheal disease in children under 5 years of age documented serious deficiencies in patient education as performed by health workers. Based on these results, the Ministry of Health (MOH) designed an inservice training program that promoted education as an integral component of curative care. The training program was implemented in all five health regions of the country. An evaluation of the training's impact on the delivery of patient education indicated dramatic increases in the number of messages health workers communicated to mothers. This experience demonstrated that the patient education practices of health workers can be improved through inservice training that integrates the teaching of clinical and communication skills. Additional study in C.A.R. is needed to (1) further improve the quality of patient education for diarrhea and other childhood communicable diseases, (2) determine the impact of patient education on the care provided by mothers in the home following a clinic visit, and (3) assess how operational research can be conducted within the limitations of inservice training programs and routine clinical operations.