

DOCUMENT RESUME

ED 374 254

CE 067 167

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TITLE Diagnostic Techniques for Training and Development.  
PUB DATE Nov 93  
NOTE 17p.; Paper presented at the Annual Meeting of the American Association for Adult and Continuing Education (Dallas, TX, November 1993).  
PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (Opinion/Position Papers, Essays, etc.) (120)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Adult Education; \*Corporate Education; \*Educational Needs; \*Evaluation Methods; Models; \*Needs Assessment; \*Student Evaluation

ABSTRACT

Adult educators undertaking training assignments with businesses or industrial firms should use the following methods to conduct a complete needs assessment to determine the scope, depth, length, and cost of training required: general questionnaires/surveys; interviews with several prospective trainees and their administrative supervisors; assessment of records and documents; review of the company's training history; and review of the organizational climate, culture, and levels of support. The diagnostic techniques used during the needs assessment should be comprehensive enough to determine the following: who needs training (intended participants' age, maturity, and educational and experience levels and the organization's philosophies, policies, and practices); why training is needed (mandatory versus voluntary training, participant and company/management expectations, and barriers to training); how and where the training will be conducted (on-site versus off-site training, room arrangements, and special audiovisual equipment needed); what is to be taught and what training strategies and methods will be used (pacing, classroom techniques, adult education skills required of the trainer, and instructional and evaluation techniques); and how much the training will cost (including the costs of instruction, material, travel/housing, certification, and celebration). (Contains 37 references.) (MN)

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# DIAGNOSTIC TECHNIQUES FOR TRAINING AND DEVELOPMENT

by

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(Often a special diagnostic visit and meeting(s) with the company or firm officials beforehand, to discuss these important training questions or learning objectives, are highly recommended for greater training results.)

## Introduction:

As you begin your training assignment with a business or industrial firm it is important to know some background information about the firm and participants who will be involved in the training program / process. It is strongly recommended that a full or complete needs assessment of the training needs for the entire group be conducted as soon as possible. A formal needs assessment might include a general questionnaire or short surveys, special insightful interviews with several of the prospective trainees and their administrative supervisors, an assessment of records and documents, a review of the company's training history (successes and failures), finally a review of the organizational climate, culture and levels of support are additional means for gaining a good overview and training perspective.

## Assessment Questions For Consideration. . .

- I. **WHO NEEDS TRAINING?** Some important key questions might include:
  - 1) "What are the age levels of the trainees?" Are they older employees? Or are they a younger cohort group? By asking age-level-related questions, insights might be gained as to what their age-related developmental needs or concerns might be?

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Secondly, "What are the socioemotional or sophistication levels of the group?" By ascertaining the maturity levels or levels of sophistication the trainer can decide on a comfort level of expectancy, a participant readiness level and relevancy of training ideas. Then, the trainer does not necessarily need to go back and attempt to teach elementary or fundamental principles that already may have been known or previously internalized by the group.

Thirdly, "What are the numbers of males, females, and the total number of participants?" It is important to determine these figures so that when gender appropriate illustrations or examples are used during the actual training sessions the illustrations become meaningful to the participants. For example, using a training illustration such as a "dramatic hunting story" or analogy might be interesting to a group of men; but may not be appropriate for a group of most women. Sensitivity to gender issues is very important! Also, on a very practical level, by knowing the numbers of participants, an appropriate number of handouts or training materials can be produced for use by the group members.

Fourthly, "What are the educational backgrounds / levels of the participants?" If this information is known then the trainer need not attempt to aim the training or instructional levels either too low or too high, but just right for the best comprehension and understanding levels of the trainees.

Fifthly, "What are the experience levels of the trainees?" Knowing these responses helps the trainer prepare the training documents and materials for either a beginning, intermediate or advanced group of learners. It might prove embarrassing for the trainer to arrive at a session with only a "brown bag" set of

materials when the group is actually ready for the "silver service" phase of training. Another example occurred; however, in the reverse, when a trainer attempted to conduct an advanced level EMT training session for a group of voluntary firefighters. Not knowing that a couple of the participants were in fact non-readers, therefore, definite adjustments had to be made for the participant involved in that session.

Thus, it is important to know some background information about the trainees or participants. It is also vital to have an insightful and a good working knowledge about the company and relationship with the firm sponsoring the training programs.

"What are the company's philosophies, policies and practices regarding their employees? About training? About management practices?. About communication patterns? About level(s) of support?"

Knowing the organization's climate, structure, environment and working conditions of it's employees tells the trainer what possible organizational barriers might be encountered in the training sessions. Does the company or firm have an "open" or "closed" management system? Is it strictly "top down" directives or memos from the C.E.O.; and / or do good communication patterns extend from the "bottom-up" and "across the various departments"? What are the company's overall policies and practices regarding training and instruction? Does the firm grant "release time" for training? Do they provide financial support for attendance at national and regional conferences for special workshops, or for training sessions? In general, does the company or firm take a proactive and enlightened learning approach to training and staff development?

What are some of the "hot spots / topics" which should be addressed or avoided during the training sessions? An interesting situation arose, by way of illustration, when an off-site training or field-based session was proposed and highly recommended to the administrators of a company by an unknowing trainer which proved to be quite embarrassing, because the firm had just spent over 12 million dollars developing a brand new training facility.

Business ethics, age and gender issues, affirmative action practices, promotion and tenure policies, are also sensitive company concerns, which must be studied carefully by the trainer. Whether these or other controversial issues should or should not be addressed, amplified, or modified need to be identified and researched in order for the training sessions to be successful. Knowing the "hot spots/ issues" are important!

## **II. WHY ARE THE PARTICIPANTS ATTENDING THE TRAINING SESSIONS?**

Answers to these questions are extremely meaningful and relevant to the successful trainer and training program. Are the participants "generally advised" to attend the training sessions voluntarily or are they required to do so?

(Oh, yes! John, by the way, you will be attending the company sponsored training session next week, and you'll report back with the results and content which you learned).

There are a set of barriers and strong participant resistance which must be overcome by the skillful trainer when the training sessions are compulsory and there is mandated or involuntary attendance. Coping with participant hostility or defensiveness can be more palatable if the trainer projects him/her self as a caring

friend, a facilitator, or guide, rather than as a teacher / authority. Often a smile, an extended hand of welcome, relieves the tension of hostility or fear.

Be honest, friendly and indicate: "Look, we're all in this training business together -- we can learn from each other and we can help one another succeed."

Trust must be earned and can be, over an extended period of time.

What are the company's upper management expectations for the training sessions? What are managements special needs? A skillful trainer should inquire about these expectations and concerns beforehand. Does upper management have a "hidden agenda" for providing special training for the participants at this particular time? Therefore, it behooves the trainer to be up front and be knowledgeable about the firm's expectations and training purposes and agenda.

What are the company's benefits or reward systems for the training sessions? Will recognition be granted by the company for successfully trained employees? Will there be special pay incentives for attendance? Will promotions be granted? Will there be participant status changes made as a result of the training? Will other benefits accrue? Will certificates of accomplishment or C.E.U's be awarded? Will managers or immediate supervisors recognize trained participants? How? In what way? What kind of recognition and or socioemotional support will be given by the trainees' peers? Will advanced employee training be acknowledged as a "perk" or an incentive for others to attend additional or future sessions?

What are the participants special expectations or needs for the training sessions? What do they wish to learn? Have their requests been addressed and attended to? Have the employees met in focused groups to discuss their training

needs or special problems? Will special on-the-job techniques or improved skills be the focus of the training session? Will the training objective(s) be based on team / unit building skills and better communication patterns? Will attitudinal shifts, team strengthening, unit development, or just plain rest and recuperation (R& R) be the goal(s)?

Is the focus of the training sessions organizational change and development? If yes, this would be a noble objective but really nonsense. Real and lasting change will not be accomplished by one, or by a couple of training sessions. Change may occur when there is a complete revamping or evolution of company philosophies, policies, and practices. The change process can be accomplished through company visioning and mission development sessions and major strategic planning sessions.

What are the participants' barriers to learning? Reviewing training history or the previous training outcomes is in order. Were the sessions positive or negative? Why / why not? In what specific areas? Under what circumstances? Comment! Such discussion of these responses are referred to as assessment strategies and can be the basis for building future training programs.

What are the educational limitations of the participants? Are there any diagnosed math problems, reading difficulties, writing deficiencies, or other special needs? Should intermediate or advanced training be the focus of the training sessions, or is remedial work on the basics still needed?

What is the timetable proposed for the training schedule? Are the training objectives realistic and within the timeframes proposed? Will more time be needed for the participants to internalize the major concepts or principles; adequate practice

for the skills learned; or additional special requirements?

Other questions raised: Is this the best time for training? Are work or production schedules tight at this time? Are there overwhelming previous commitments or pressing assignments that must be met -- is this the right time for training? Why, now? Who says so?

### **III. WHEN AND WHERE WILL THE TRAINING TAKE PLACE?**

Asking such specific questions as "The Where" and "The When" training will take place are crucial elements for determining effective learning and staff development. Will the training take place on-site or off-site? There are definite advantages as well as disadvantages for conducting the training sessions on-site as well as conducting the training off-site. If off-site is the determination, then it is recommended finding a quiet place, such as in a hotel/motel; or better yet, a retreat-like (resort) setting where trainees' spirits and attitudes can be renewed and refreshed as well as a dealing with content of a full training agenda.

But if it has been determined to reduce travel costs, meals and housing expenses, then by scheduling the training sessions at the work-site then additional questions need to be asked.

Is there a training or conference facility at the company available for use for the sessions? Are there adequate classroom facilities with comfortable chairs (for larger and more mature trainees) and wider tables (so that the participants can spread out their instructional materials)? Is there movable furniture -- so that small group discussion(s) can take place in settings where conversation is encouraged and feedback is necessary so that the concepts/principles conveyed in the presentations



can be employed into specific practice(s)? One of the most effective training designs is the "U-shaped" or horseshoe shaped arranged rooms - where eye contact, venues for presentation and discussion are paramount. Will audio-visual aids be available: such as an overhead projector and screen, a VCR and monitor, newsprint, chalk board and other training tools? Proper creature comforts and necessary training aids are so important for adult learners and effective trainers.

Will there be sufficient refreshment and/or coffee breaks scheduled?

Often a great deal of learning through valuable discussion of application(s) takes place among the small groups of participants standing around the coffee pot after the lectures / presentations.

Adequate heating / air conditioning, proper lighting, good ventilation and no smoking policies are definite musts which should be added to the list for the overall physical comfort levels / zones of adult learners.

Will lunch be served to the trainees on site as a "working lunch", or will the trainees use the lunch-break period as a time for renewal of personal acquaintances and professional sharing of experiences?

How long will the training be scheduled? One full-day? Two or three days? Will this be sufficient time to have a natural progression or crescendo of ideas to reach a training climax and then a recapitulation process for major applications?

Has there been a master training agenda developed by the planners with trainees' allowing for their important input of ideas, posing "real" problems or concerns and suggestions for areas for improvement? Will there be time to practice the concepts learned through field tests and application(s)? If so, have

arrangements been made to go off-site for the field tests? Will there be transportation there and back? Will sufficient "down-time" be built into the program for internalization of the new principles learned? For adequate peer discussion as to how the new ideas might be incorporated, modified or changed? If so, when? By what means?

#### **IV. WHAT IS TO BE LEARNED AT THE TRAINING SESSIONS?**

Discovering "The What" to be learned is most relevant to the training process. Important planning concepts and assessment strategies were discussed previously and now they are being implemented in terms of consideration of instructional principles and strategies.

- . Is there new information to be learned?
- . Have sufficient outlines and learning objectives been developed for proper sequencing of ideas?
- . Was an advanced organizer of detailed topics/ learnings used?
- . Did the trainer share his/her lesson plan(s) with the trainees?
- . Has special attention been paid to the proper pacing of instruction for internalization of ideas?
- . Have relevant "often remembered illustrations" been used?
- . Have the participants really grasped the new ideas confidently and well?
- . Did the participants really hear the ideas presented?
- . Were the presenter / participants expectations realized and clarified?
- . Were there many questions and "what if" queries posed?
- . Was there a good balance between research theories and meaningful practice?

- . Did the theories address or support the work site problems or questions under consideration?
- . Can the participants now apply the theories in their job responsibilities?

The major question is: does / did the instructor / trainer relate the material effectively to the needs of the trainees? Did the instructor / trainer pay attention to the special needs of the educationally or physically challenged?

Did the new skills/ techniques learned -- build on old skills or previous techniques used? Did the instructor use positive imagery or visioning techniques to help in the learning process? Was there special attention paid to different learning modes of the participants? To various participant learning styles or how people process information differently?

Was there a good mix of "hands on learning" activities used besides the presentations, adequate time for discussion, and/or independent study and research?

Did the instructor/ trainer use good didactic instructional or teaching techniques; such as "whole (concepts) broken into individual part(s) and back to whole (concept summaries) instructional patterns ? " Were allowances made for participants to practice the new techniques and/or skills learned? Were instructional interventions and coaching critiques utilized with additional participant practice (to cement the new ideas learned)? In other words, were good adult education instruction and practices employed?

Were the training sessions judged as effective and meaningful? How were the sessions evaluated? If so, what criteria were used? Did the instructor utilize

quantitative measures and qualitative treatment, such as statistical analysis and treatment of data provided? Were personal interviews with participant feedback given? What about future impacts and followup evaluation measures? Will additional or advanced training be scheduled as a result of participant feedback and evaluation measures?

#### **V. HOW MUCH? MAJOR COSTS INVOLVED?**

As you conclude your initial diagnostic skills interview(s) with the company or industrial firm some final questions or issues regarding the training budget should be addressed. The first area which should be addressed is instructional payment for services rendered. Will there be a contract or written agreement made between the instructor and the company / firm?

The payment procedure(s) for the instructor's honoraria should be discussed; will the trainer be paid by the hour, by the session(s), or by the day?

Will the instructor/ trainer be compensated for his/her preparation or coordination time spent gathering materials, writing and preparing the handouts, visual aids, writing the training schedule? Will the instructor be compensated for these and other necessary preparation steps taken for a successful training program?

Other important consulting questions -- will travel, meals (per diem) and overnight housing accommodations be included in the training contract? Will a budget of training needs and expenses be submitted to the company or industrial firm? What other special training perks might be provided by the company or firm? For example, will notebooks, pencils, pins, photographs of the participants or of the special event be included ?

Finally, will certificates designating participant completion or Continuing Education Units (C.E.U.'s) be awarded at the end of the training session or program? What other concerns / issues should or need be addressed?

**Conclusion(s)** Determining the scope, depth, and length of any training program should be determined as soon as possible after the initial diagnostic visit to a company or firm, and certainly, prior to any contractual/ legally binding agreement.

The purpose of the diagnostic skills training model is to provide an overall training assessment process. It is best for the parties (company sponsors, training consultant(s), and employees' representatives) to determine collectively what training is needed, why it should be provided, when and where it will be provided and how much it should cost. Determining the training parameters, in the form of a training specification (proposal) is the best estimate of the magnitude of the needed training. This is definitely needed to determine the anticipated costs and other considerations. The written proposal is the next logical step in the process.

The needs assessment (DST Model) process determines the scope, kind and type, and extent of training required using the major specifics of the "5 W's & H". Using the DST Model can be useful and helpful in determining a successful training assessment and eventual successful training program.

Good luck and much success!!!

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**A Paper Presented to the 1993 National Adult Education Conference  
at the Loews Anatole Hotel - Dallas, TX - November 17-20, 1993**

## Diagnostic Techniques for Training And Development Matrix

### I. WHO

- > Training Needs?
  - > Formal & Informal Assessment / Techniques
- > Backgrounds Discovered
  - . Participants
  - . Age / maturity levels
  - . Educational levels
  - . Experience levels
- > Organization / Firm's
  - . philosophies
  - . policies
  - . practices

### II. WHY

- > Are Participants Attending?
  - . Required or Voluntary
- > Expectations & Special Needs
  - . Company & Managemt. Expectations
  - . Special Agendas
- > Participants Expectations
  - . Barriers
    - . Training
    - . Limitations
      - . time
      - . education
    - . Psychosocial
    - . Institutional
    - . Organizational

### III. HOW & WHERE

- > Training / Instruction
  - . On / off Site
  - . Time / timetable
  - . Room Arrangements
  - . Comfort Zones
  - . Special AV Equipment

### IV. WHAT (Strategies & Methods)

- > Content to be learned
  - . Pacing \*
  - . Techniques
  - . A.E. Skills
  - . Change/Revision
  - . Instruction
  - . Evaluation Process

### V. HOW MUCH

- > Major Costs Involved
  - . Instructional Pay
  - . Lunch/Breaks
  - . Prep Time/ Coord.
  - . Materials
  - . Per diem / Meals
  - . Travel / Housing
  - . Certification
  - . Celebration

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