Training

Overview

- When and why is training necessary?
- How should a training program be conducted?
- How are training needs determined?
- What goes into the design of an effective training program?
- What are some of the commonly used training methods?
- How can we determine whether training has been effective?

Employee Training

Why?

- Provide knowledge and skills required to perform effectively.

When?

- New hires (to complement selection)
- Change of jobs (e.g., transfer, promotion)
- Change to jobs (e.g., new technology; realignment)
- Performance deficiencies detected

Employee Development

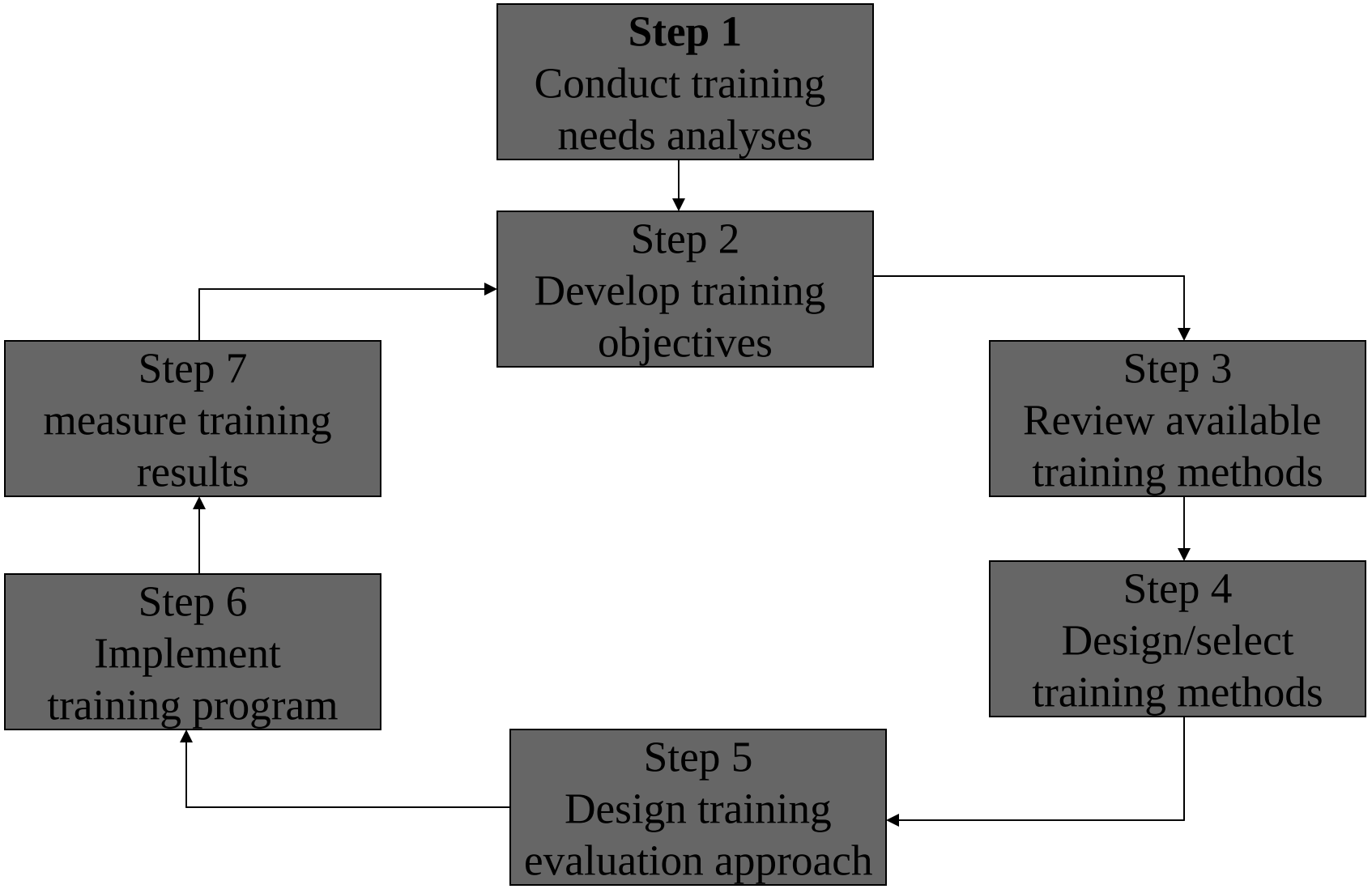
Why?

- Prepare employees for future positions
- Upgrade general skills for personal growth

When?

- Internal promotion policy
- QWL programs
- Team building
- Developing/changing organizational culture

The Training Process



Needs Analysis

Levels of Analysis

1. Organizational Analysis
   - Identification of short- and long-term goals
   - Identification of human resource needs
   - Evaluation of methods of meeting HR needs (e.g., selection, training)
   - Assessment of resource availability
   - Evaluation of support for transfer of training

Needs Analysis

Levels of Analysis

2. Task (Job) Analysis
   - Identification of: tasks
     standards
     optimal procedures

Needs Analysis

Levels of Analysis

3. Person Analysis
   - Evaluation of individual against standards
   - Identification of deficiencies
   - Identification of causes (e.g., motivation vs. ability)

Needs Analysis

Levels of Analysis

4. Demographic Analysis
   - Assess the specific training needs of various demographic groups (e.g., the disabled, or those protected by civil rights legislation).

Other Common Reasons for Training

- Poor performance (without analysis)

  "They're not performing, therefore they must need training"

- Fad

  "Everyone else is doing it"

- Reward

  "They deserve it"

- Habit

  "We've always done it. Besides, we have a budget for it"

Types of Training Programs

On-Site Training

- On-the-job training
- Apprentice training
- Coaching/mentoring
- Job rotation
- On-line help (as needed)

Types of Training Programs

Off-Site Training

- Lectures/seminars
- Multi-media presentations
- Programmed/Computer-assisted instruction
- Simulation
- Cases studies/management games
- Role-playing
- Behaviour modelling

Selection and Development of Training Methods

Factors to Consider

1. Purpose (based on needs analysis)

   Common objectives include

   - Information acquisition
   - Skills development (e.g., motor, interpersonal, problem solving, decision-making)

Selection and Development of Training Methods

Factors to Consider

2. Principles of Learning
   i. Motivation to learn
      - Relevance and meaningfulness
      - Adequate preparation & self-efficacy
      - Choice/participation (e.g., time, content)
      - Clear goals
      - Reinforcement
   ii. Feedback
   iii. Opportunity to practice

Selection and Development of Training Methods

Factors to Consider

3. Transfer of Training

   Facilitated by:

   - Similarity of setting and task
   - Overlearning
   - Teaching of general principles
   - Reinforcement of transfer

Selection and Development of Training Methods

Factors to Consider

4. Individual Differences

Should accommodate differences in:

- Readiness to learn
- Motivation to learn
- Preferred learning style

Selection and Development of Training Methods

Factors to Consider

5. Trainer Qualifications

   Trainers should:

   - Have knowledge of the organization
   - Be knowledgeable about content
   - Be motivated to train
   - Understand principles of learning

6. Cost

Evaluation of Training

Criteria (based on Kirkpatrick, 1976)

- Reaction
  - Did employees like the training, think it was useful, feel more confident in their abilities?
- Learning
  - Did employees learn anything new?
- Behavioural
  - Do trainees behave any differently back on the job?
- Results
  - Did the training have the desired outcome?

Designing an Evaluation Study

Issues to Consider

1. Internal Validity
   - accuracy of inference concerning effect of training
2. External Validity
   - accuracy of inference regarding generalizability
3. Construct Validity
   - accuracy of inference about why the training worked

Research Designs

Pre-experimental Designs

- One-group Posttest Only Design

  T X

- One-group Pre-test / Post-test Design

  X T X

Key

X = measure T = training R = random assignment

Threats to Internal Validity

Threats controlled by Random Assignment

- History
- Maturation
- Selection
- Testing
- Instrumentation
- Attrition (Mortality)
- Statistical Regression

Research Designs

Experimental Designs

- Pre-test / Post-test Control Group Design

R	X	T	X
R	X		X

- Pre-test Only Control Group Design

R	T	X
R		X

Key

X = measure T = training R = random assignment

Research Designs

Experimental Designs

- Solomon Four-Group Design

R	X	T	X
R	X		X
R		T	X
R			X

Key

X = measure T = training R = random assignment

Threats to Internal Validity

Threats <u>not</u> controlled by Random Assignment

- Local history
- Diffusion or imitation of treatment
- Compensatory equalization of treatment
- Compensatory rivalry
- Resentful demoralization

Research Designs

Quasi-experimental Designs

- Pre-test / Post-test Nonequivalent Groups Design

X	T	X
X		X

- Alternate Treatments Design

X	T	X		X
X		X	T	X

Key

X = measure T = training R = random assignment

Research Designs

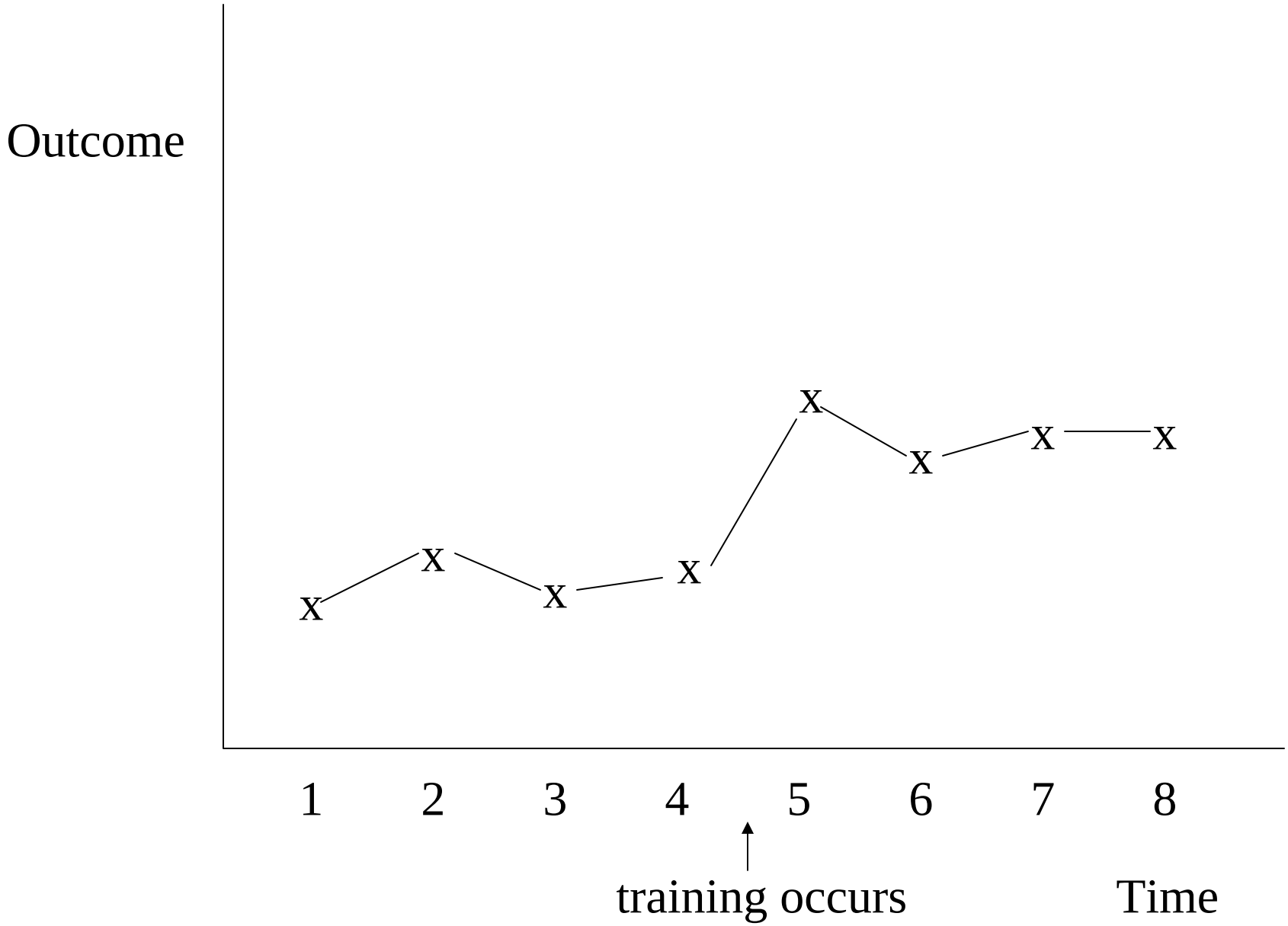
Quasi-experimental Designs

- Time-series Design

X X X X T X X X X

Key

X = measure T = training R = random assignment


Outcome
1
2
3
4
5
6
7
8
training occurs
Time

Threats to External Validity

Examples

- Interaction of testing and treatment
- Interaction of setting and treatment
- Interaction of history and treatment
- etc.

Threats to Construct Validity

Examples:

- Placebo effect
- Hawthorne effect
- Pygmalion effect

Evaluation of Training: An Example

Source: Latham & Saari (1979)

Purpose: Evaluate the effectiveness of behaviour modelling as a training technique

Evaluation of Training: An Example

Focus of Training:

- Orienting new employees
- Giving recognition
- Motivating poor performers
- Correcting poor habits
- Discussing potential disciplinary action
- Reducing absenteeism
- Handling a complaining employee
- Reducing turnover
- Overcoming resistance to change

Evaluation of Training: An Example

Length of Training: 2 hrs/wk for 9 weeks

Training Procedure:

- Initial instructions (learning points)
- Videotape of model
- Role-playing
- Feedback
- Monitoring and reinforcement

Evaluation of Training: An Example

Research Design:

- Participants were male first-line supervisors
- Randomly divided into two groups
  - Experimental (training)
  - Control (waiting list)

Evaluation of Training: An Example

Dependent Measures and Results:

- Reactions
  - Survey of attitudes immediately following training & 6 months later
  - Ratings were found to be uniformly high
- Learning
  - Multiple choice test administered 6 months after training
  - Exp't > Control
- Behaviour
  - Role playing 3 months after training
  - Exp't > Control
- Results
  - Performance appraisal (standard and BOS)
  - Pre-training: Exp't = Control
  - Post-training: Exp't > Control