Objective 6 : Designing a training module
EXAMPLE
E-09

1. Needs

The director of a construction company has just signed an important contract with town officials for the construction of a nursery school, a company canteen, and a Sports complex. He thus needs three additional . Rather than hiring new staff, he has decided to promote three technicians who seem to exhibit good potential for handling this type of work.

You are to help him to define his needs :

Knowledge

Work regulations.
Building code.
Composition of main materials.

Know-how

Techniques with which the three candidates are not yet familiar :
digging foundations
slab of cement
installing a crane
Methods and tools to acquire :
driving a crane
work site management methodology

Human skills

team management
negotiations (suppliers, customers)
refresher techniques

2. Audience

Bill - Mason - 45 years old - 25 years' seniority in Cie.
Has a good knowledge of materials. He has been responsible for many construction sites as a foreman, and has learned on the job about all the various steps in the construction process.
He is interested in the promotion but lacks self-confidence.

Paul - Young man with technical certificate in work site management - 25 years old - 2 years' seniority. Has good knowledge of techniques theoretically, but with very little practical experience. He is serious, but a little impatient. He is lacking knowledge in many areas, and has not yet managed a team.
He is pleased that his superior entrusts him with such a great responsibility.

Greg - Roofer - 43 years old - 23 years' seniority in Cie.
Experience acquired in the field. He is used to managing his team of roofers by yelling at them.
He is very interested in this position, but he will need to learn to manage a team in a more flexible way.

3. The ultimate purpose of training program.

The final result expected from the training program is that the three candidates for the site manager positions should be able, within a period of six months, to fully manage a construction site-- from the reading of blueprints right to final acceptance of the site by the customer, including :

- Relationships with customers and suppliers
- Management of the teams
- Work tracking and inspection

4. Teaching objectives

Knowledge

1. Know applicable regulations
   1.1. building codes
   1.2. labor laws
2. know safety rules for work sites
3. Know the various materials used on a work site
   3.1. various components
   3.2. interactions with the environment

Know-how

1. Master techniques
   1.1. Be able to construct building foundations
   1.2. Know how to pour a concrete slab appropriate for the building under construction
   1.3. Be able to direct the assembly of a crane
2. Use methods
   2.1. Be able to assess the crane operator's skills
   2.2. Master work site management

Human skills

1. Be able to manage a team
   1.1. Be able to manage interpersonal relationships
   1.2. Be able to organize team assignments
2. Know how to set objectives and reach them
   2.1. Be able to define objectives and measure results
   2.2. Know how to react effectively in cases of discrepancies
3. Maintain effective and friendly relationships with outside partners
   3.1. Know techniques for negotiation

5. Course entry requirements

The three candidates for the training course will have to

- Already have worked on several building construction sites
- Have at least ten years' experience in the building field, or have an appropriate technical training diploma (see international educational level equivalents)
- Fully master building techniques : surveying, masonry, carpentry, roofing, joining, heating, plumbing, electricity
- Be motivated to assume both technical and human responsibilities

6. Content

Knowledge

1. Obtain excerpts from appropriate legislation
2. Safety nomenclature to be observed.
3. The various materials in use on the work site

Know-how

1. Techniques
   1.1. test boring of terrain.
   1.2. specifications for concrete slabs.
   1.3. selection of appropriate crane.
2. Methods
   2.1. crane operation
   2.2. work site management phases

Human skills

1. Team management techniques
2. Setting objectives.
3. Negotiating techniques with both customers and suppliers.

7. The teaching scenario

Example for teaching objective No 1
Know applicable regulations

Review :
Content 1.
Excerpts from appropriate legislation
Content 1.1.
Guidelines for obtaining a building permit

Scenario 1
Lecture
The importance of complying with regulations in the building field : concerning both building code and personnel management

Scenario 1.1.

1) Presentation
Excerpts from regulations dealing with obtaining building permits

2) Exercise in 3 sub-groups (20 minutes)
Case study "You have just obtained a contract for building a nursery school. List the various steps to follow in order to obtain a building permit"

3) Reporting back to the group as a whole (5 min x 3 = 15 minutes)
A secretary is appointed for each subgroup to present the results of their work.
The secretary or trainer writes the information down on the paperboard.
Group discussions.

4) Summary
Reminder of main points to be retained

8. Assessment

1) Assessment of acquired notions at course midpoint

Of objective 1.1 : Know applicable building code

Assessment exercise in small groups

- "Can you recite the titles of the main regulatory texts in the building code ?"
- "What are the various steps to follow in order to obtain a building permit ?"

2) Final assessment of acquired notions

Questionnaire concerning all **course content** covered during the program

True/false

- Labor laws do exist specific to the building profession	true	false
- Cement is comprised of 50% gravel and 50% sand	true	false
- The thickness of the concrete slab is independent of the size of the building to be built	true	false
- The worksite manager should know how to perform all of the jobs required on his work site	true	false
- The reference frame is an important notion in interpersonal relationships	true	false
- Active listening is an essential tool in conflict management	true	false

Open questions

- Can you list the three main steps in obtaining a building permit ?
- How long does it take to get a building permit ?
- Can you recite the safety instructions applicable on a construction site ?
- What actions should be taken in order to measure whether objectives have been reached ?
- What are the main negotiating techniques ?

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3) **Satisfaction assessment** (Written questionnaire + Group discussions)

FINAL TRAINING ASSESSMENT "WORKSITE FOREMAN" course

Family Name : ..... **First Name** : .....

	fully	Ade-qua-tely	Inade-qua-tely	not at all

OBJECTIVES

- Were training objectives reached ?
  - . Know applicable regulations ☐ ☐ ☐ ☐
  - . know safety rules for worksites ☐ ☐ ☐ ☐
  - . Know the various materials ☐ ☐ ☐ ☐
  - . Master construction techniques ☐ ☐ ☐ ☐
  - . Use work site management methods ☐ ☐ ☐ ☐
  - . Be able to manage a team ☐ ☐ ☐ ☐
  - . Know how to set objectives and reach them ☐ ☐ ☐ ☐
  - . Maintain effective and friendly relationships with outside partners ☐ ☐ ☐ ☐
- Was this training course :
  - . enriching on a personal level ? **yes** **no**
  - . helpful on the professional level ? **yes** **no**
- Have you acquired new knowledge or skills ? **yes** **no**
  - . if so, describe ?

Comments :

CONTENT

- Do the notions examined during the course appear to be :
  - . easy to implement ? ☐ ☐ ☐ ☐
  - . useful ? ☐ ☐ ☐ ☐
- Do you feel that the course progression and rhythm were appropriate ? ☐ ☐ ☐ ☐
- Do you feel that there were questions of interest that were not dealt with ? **yes** **no**
  - . if so, describe ?
- What sequences did you find the most interesting ?
  - . why ?
- What sequences did you find the least interesting ?
  - . why ?
- What do you feel are the most difficult notions to put into practice ?

Comments :

TEACHING

- Were the tools and the documentation provided effective ? ☐ ☐ ☐ ☐
- Was training in theoretical notion adequate ? ☐ ☐ ☐ ☐
- Was enough time left for analysis purposes ? ☐ ☐ ☐ ☐
- Did you find that group discussions were enriching ? ☐ ☐ ☐ ☐
- Did the analyses, summaries and advice of your trainer seemed to be pertinent ? ☐ ☐ ☐ ☐
- Were the teaching methods and techniques appropriate ? ☐ ☐ ☐ ☐

- Upon completion of this training program, what are the points you feel would be worth further study ?
  - . how would you proceed ?

Comments :

SUMMARY

- On the whole, are you globally satisfied with this course ? **yes** **no**

Comments and suggestions :