

## DESIGNING TRAINING PROGRAMMES ON A COMPETENCE-BASED MANNER

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**Abstract:** The whole education system is in a tremendous transformation. New curricula for secondary education, new concept in higher education based on Bologna process, an emphasis on long life learning, etc. That is why necessary to take into consideration the competences obtained through different levels of education. Designing the training programmes based on competences is a quite new concept in Romania. The paper presents a guide that intends to facilitate the preparation of the learning packages by going step by step through the process of establishing the competence-based learning process.

### 1. INTRODUCTION

The competence-based training concept means that the trainees acquire the knowledge and skills needed to perform well and to prepare them for future changing job requirements. Under competence, we understand a combination of awareness skills, knowledge and attitude that enables the trainee to practise and demonstrate the ability to perform a task to the standards required for successful job performance.

During the training preparation, the trainers need to identify the core competences related to their specific subject of training. Based upon these competences, the trainers will formulate the training specifications and will design the competence based training programme.

The overall objective of this approach is to enable the trainers to design and develop the specifications for the competence based training learning package they are going to deliver in a specific training programme.

More specifically, the trainers will be able to:

- demonstrate a working knowledge of competence based training,
- identify and select the main competencies related to their learning package,
- develop objectives, outcomes, activities and criteria to assess the outcomes, and
- develop the process whereby participant demonstrate mastery of the competencies

Following, a methodology of a training programme is proposed and presented.

### 2. DETERMINING THE COMPETENCIES

The foundation of a competence based training programme is the identification of Knowledge, Skills, and Abilities (KSA's) within the subject area or combination of different subject areas that are necessary in order to perform a major task in the work setting of the future job.

These competences need to be observable, behavioural acts that require a combination of KSA's to execute. It is important that the participants know in advance what competences they will be developing. In other words, the training will be more successful when the results of the training can be easily defined.

There are three steps to developing competence-based definitions related to a training programme.

**Step1:** Identify the specific competences learners need to demonstrate at completion of the training programme that will benefit the goals and objectives.

For any given programme, there will generally be between two and seven key competences. For example, if we are dealing with a Human resource management programme, one of the competences may be in "Performance appraisal".

**Step 2:** Determine the elements that make up the competence. The elements of a competence are a combination of actions, resulting from possession of skills, abilities and knowledge, required to demonstrate achievement of the competence.

Each competence will generally consist of 3-5 elements. If we continue the example from step 1, these elements may be:

1. Identifying subordinate performance goals and targets
2. Establishing challenging and specific goals
3. Developing tracking systems that objectively monitor performance
4. Providing feedback to subordinates on progress and achievements
5. Conduct an Annual performance interview

**Step 3:** Define each competence using the 3-5 elements as the basis for the definition. Starting from previous example, the competence in "Performance appraisal" can be defined as: *The capacity to identifying subordinate performance goals and targets, establish challenging and specific goals, coaching on how to apply knowledge of organisational functions and protocols and developing tracking systems that objectively monitor performance, and provide feedback to employees on goal progress and accomplishment.*

### 3. SPECIFY THE LEARNING OBJECTIVES

The next step in creating the competence based programme is to define the specific learning objectives. These learning objectives specify the combination of knowledge and skills to be developed in the training that will produce these competences. The learning objectives should be specific and in the form of action statements.

An action statement should start with a verb and include the object of the action. After the learning objectives have been written in the form of action statements the trainer needs to insure they are linked to their relevant competences.

The learning objectives should be short, succinct, and precise.

For example, if we are talking about a Human resource development programme, such an objective may be formulated as follows:

*Upon completion of the HRD module, the participant is able to:*

- *Develop a goal-setting plan for improving subordinate performance.*
- *Use a task analysis to identify important job functions.*
- *Describe the five components of effective coaching on the workplace.*

### 4. IDENTIFYING LEARNING OUTCOMES

The next step is to determine the learning outcomes that will result from the training. This step is essential because it provides the basis for developing instructional objectives

and measures of outcomes. In his study, "Learning Outcomes and Their Effects"<sup>1</sup> Gagne proposed a set of five distinct types of learning outcomes: procedural knowledge, declarative knowledge, cognitive strategies, motor skills, and attitudes. The model of learning outcomes proposed by him serves as a useful guide.

**Procedural Knowledge.** Procedural knowledge includes concepts, rules, and procedures, project writing can be viewed as rules composed of concepts. Procedural knowledge involves a sequence, first an individual takes one action, then another, followed by another.

Usually, such an outcome is formulated like: "understand the key principles of ...."

**Declarative Knowledge.** The second category, declarative knowledge, results when a person is able to declare or state something. It consists of facts and or organized knowledge.

One typical form is: "demonstrate the necessary understanding on ...."

**Strategic Knowledge.** Strategic knowledge refers to skills in knowing when and how to use declarative and procedural knowledge. To accomplish this objective, participants need to apply the declarative and procedural knowledge they have acquired to the solution of the problem (for example: "to design short-mid term strategic planning").

**Skills.** A skill is identified as a demonstration of performance that can be attained by repetition. In other words, learning consists of practices of the performance itself, under conditions in which reinforcement occurs, resulting in gradual improvement in the skill (such as: "apply instruments for monitoring and evaluating programmes").

**Attitudes.** Attitudes are inferred internal states that influence the choice of personal action. We cannot observe them directly but must make inferences from one or another kind of observable behaviour (i.e. "develop a constructive thinking about ...").

## 5. DETERMINING INSTRUCTIONAL ACTIVITIES

The next step in developing a competence-based training is to determine the learning activities participants will engage in to achieve the instructional objectives. Training involves using a wide range of practical techniques and methods to actively engage participants in training and to encourage them to contribute to the learning process.

The key to successful training is to select the activity that makes the learning meaningful and enables to practise and demonstrate the competences needed.

The activities below are all tried and tested and most are very common in the field of training.

**Trainer lead sessions** are often the best way to introduce and outline the subject, to convey knowledge, information and structures and to summarise or highlight most relevant issues related to the subject. Practical examples will support the understanding of the subject, in particular when it is new for participants.

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<sup>1</sup> Gagne, R. M. (1984) Learning Outcomes and Their Effects: Useful Categories of Human Performance American Psychologist 39(4) 377-385. Motor skills are lesser appropriate therefore taken here taken out.

**Readings** provide background information or more detailing on the subject area, training participants are able to master the knowledge themselves at own speed and own place but some reading instructions or guidelines will help to facilitate and accelerate the learning process. Including questions in the reading materials will help to focus on the most relevant issues and enable the participant to self-assess his/her level of understanding.

**Debate/discussion** forms a good platform to exchange opinion, to test own logic and reasoning on critical issues related to the subject. This is in particular of importance when it concerns behavioural competences related to ethical issues, values, norms and/or themes where people have strong opinions about such as client orientation and service provision.

**Role-plays** enable participants to practise skills and help to understand different positions and perspectives and act upon others behaviour. Role-plays are ideal to develop professional communication skills and/or perform task related skills in a protected/safe environment with opportunity of receiving constructive feedback on own performance.

**Case studies** are an ideal way to learn how to handle specific situations and/or problems that might occur in a professional setting. A case study is usually based upon a scenario of real existing problem in which participants have specific tasks/role to perform in order to practise certain skills with the aim to find an appropriate solution. Like with role-play, case study provide a safe environment with structured feedback from other group members. You have to take into account that feedback takes up considerable training time.

**Exercises** enable the participant to practise individually or as a group applying methods, tools and techniques or simply to demonstrate knowledge, understanding, logic and reasoning, insight, problem solving skills and/or skills to capture the main issues. Exercises can be short or long.

## 6. ASSESSMENT OF LEARNING OUTCOMES

Trainees can be assessed in two ways, namely formative and summative assessment.

**1. Formative assessment** is used as a way of getting information about the participant's performance during the delivery of the learning package. For the participant, the result of informal assessment is a useful way of checking on progress and for the trainer a basis on which to decide whether there is a need to adjust the training methods.

**2. Summative assessment** is used to determine whether the participant's should or should not be awarded a certificate and must therefore be recorded. The assessment instrument must therefore be designed to meet the requirements of the training.

There are different ways to assess the learning outcomes but the overall effectiveness of competency-based training is based upon the participant's ability to demonstrate attainment or mastery of the competence performed under certain conditions to specific standards. This involves observation, product evaluation and questioning.

All methods of assessment fall within at least one of the following.

**Self-assessment.** Self-assessment is a useful way to have participants reflected on what they learned during the training they have a need and a right to be responsible for

their own development. Participants should be encouraged to take responsibility for developing themselves, identify their own strengths and weaknesses and set themselves clear development objectives.

*Suggested assessment method.* A common way is to ask questions related to the content of the training and ask participants to complete the questions). Another way is to provide participants a structured questionnaire about how the participant feels he/she performs the competence learned.

**Declarative Knowledge.** With the help of simulated test questions, the participant can test in an easy and quick way his/her knowledge and understanding on the subject matter of the training learning package.

*Suggested assessment method.* Standardized objective assessment methods (e.g., fill in the blank, multiple choice, true/false, work well for assessing these types of competencies. Also short answer essay type questions work well for assessing knowledge to determine relevant information and concepts are understood.

**Procedural Knowledge.** The possession of procedural knowledge is shown when a person is able to apply a sequence of concepts representing condition and action to a variety of situations.

*Suggested assessment method.* One way to demonstrate participants acquired knowledge is to provide them with a variety of standardized situations and let them respond to the situations. For example, participants are requested to apply the steps involved in conducting a task analysis.

**Strategic Knowledge.** Assessing cognitive strategies is more complicated than either declarative or procedural knowledge. The measurement of the product of the thought processes will depend on the type of action the learner is taking.

*Suggested assessment method.* For examining thought processes, a method often used is presenting learners with a case study or scenario and then ask them to work through the problem. It is important to assess the concepts the participant employed in solving the problem and whether those concepts have been used appropriately.

**Skills.** Skills are learned/trained capacities that can be demonstrated as a performance in a training context under given conditions and/or in a real case - professional setting.

*Suggested assessment method.* Assessment of skills requires tests, often simulations such as models, role-plays or work samples where participants perform actual tasks under controlled conditions.

**Attitudes.** An attitude usually is a learned, though complex mental state of mind, that tells something about the person's positive or negative approach towards a certain situation, object, person or specific issues. Attitudes influence thought, action and behaviour of a person.

*Suggested assessment method.* Evidence of attitude change is mostly assessed using Likert type scales<sup>2</sup> and pro- and post-test designs. Learners are asked to respond to a series of attitudinal items prior to training and then respond to those same items again some time after training.

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<sup>2</sup> Likert-type scale consists of a series of declarative statements. The subject is asked to indicate whether he agrees or disagrees with each statement. Commonly five options are provided: "strongly agree", "agree," "undecided," "disagree," and "strongly disagree"

## CONCLUSIONS

Successful companies are moving from a “personnel” focus toward a proactive style of Human resource management in order to add value to there activities.

By havinf a well designed competence based training and development programme any company will be able to ensure it has the right people, with the right skills, at the right time, to accomplish their objectives. This means that a competence based training programme needs to focus on building the knowledge and skills needed in a particular job.

Competence based programmes are also used to increase employees’ current job performance, prepare them for changing job requirements or introduce new tools or technology in the work place.

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