Module 3

Planning and design of outcomes-based learning
Where are you in the process?

MODULE 1:
The context of Education, Training and Development Practices

MODULE 2:
Training Needs Assessment

MODULE 3:
Planning and Design of Outcomes-based Learning

MODULE 4:
Facilitating and assessing learning

MODULE 5:
Methods, media and technology in facilitating learning

MODULE 6:
Management and Evaluation of ETD practices

MODULE 7:
Continuous occupational expertise development
Module 3:  
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Learning outcomes

After completing this module, you should be able to:

- Identify key features of a programme or course plan
- Identifying the profile and needs of the specific learners
- Explain the importance of learning outcomes
- Describe and explain standards
- Identify, develop and use competencies and their relevant standards
- Formulate learning outcomes
- Align learning outcomes with national standards
- Create a programme or course plan
- Determine a programme or course strategy
- Plan for assessment in a course
- Select and sequencing content
- Select training methods and media appropriate for the training outcomes, training venue and the learners
- Plan for the administration of a course or programme
- Identify and confirm training costs with the appropriate personnel
- Select appropriate training venue and arrange the required equipment, tools and other resources
- Make arrangements with any other people who are required to assist in the training programme
- Plan for the evaluation and reporting of a course.
Aim of this Module

The aim of Module 3 is to equip you with the knowledge and skills to plan and design a training programme or course, which you or other trainers will eventually present. The elements in the planning and design phase that you can expect to discover more about are:

- Identifying the profile and needs of the specific learners
- Formulating learning outcomes
- Aligning learning outcomes with national standards
- Determining a programme or course strategy
- Deciding on assessment
- Selecting and sequencing content
- Selecting methods and media
- Making decisions about programme administration
- Designing a trainer guide

A note on terminology

In this module use the following terms in these senses:

A **programme** is a broad term covering all the components of a systematic attempt to provide training. A programme would normally include specific courses or events.

A **course** is a component of a programme aimed at meeting some specific purpose.

A **module** is a one of a set of units of identical or very similar size and duration that usually deal with one specific part of a course or programme. A term often used, somewhat inaccurately, as a synonym for a course within a programme. Both programmes and courses can be broken up into modular components but many courses are not really modular.

**Curriculum** is a broad term covering everything that is designed to happen in a programme or course. Literally the term means a **course to be run**, and hence, educationally, a course to be followed and completed. Thus the term curriculum covers the ideas and guidelines (in the form of official documents such as syllabi or course description) about what is taught. It explicitly or implicitly will have a rationale for **why** something should be taught and to **whom**. The curriculum’s guidelines to trainers and the texts and manuals it prescribes will influence **how** something is taught, and **when** and **where**. What actually happens in the training process (whether it was consciously intended or was unintended) is also part of the curriculum.
Introduction

The designing of training programmes is preceded by the training needs analysis process which was discussed in the previous module.

But what is involved in designing the actual programme or course?

There are myriads of texts, diagrams and flow charts which outline a system for designing programmes and they all share similar features. Take this description below:

Preparing a programme or course plan

1. Have a clear purpose and a general plan to achieve your aims.
2. Write a list of objectives or learning outcomes.
3. List the ideas, methods and techniques, procedures and resources which might be used to fulfill each objective.
4. Select the ideas, methods and techniques, procedures and resources which are most likely to fulfil the objectives of each step. The design will not necessarily consist of one design element per step in the general plan. A design step may consist of several design elements.
5. Test each step in the design and check the resources allocated to each step:
   - are they going to encourage learning?
   - are they practical – can you and the learner do them?
   - are they appropriate for the learners?
   - are they in agreement with the overall purpose?
   - are they relatively free of ambiguity – will the learners understand what they have to do?
   - do they provide sufficient variety?
   - do they flow easily from one to the other?
   - are they economical – could you accomplish the same thing with less expenditure of time, effort and emotional energy?
6. Plan the details of each step in the design:
   - allocate time
   - determine groupings of people
   - plan arrangement of rooms and furniture
   - write out instructions to be given to learners
   - prepare discussion questions
   - prepare written and oral input
   - prepare assignments, tests and exams

7. List all materials and resources required

8. Distribute staff roles and responsibilities:
   - Who must do what in preparation for the event?
   - Who does what during the administration of the event?
   - Check staff commitment to the design and to their responsibilities

9. Try out new or unfamiliar procedures, techniques and resources. Pre-view any visual aids and check that all equipment works.

10. Evaluate the plan and make any changes indicated. A checklist may be useful in evaluating your plan.

11. Make any other administrative or control arrangements

12. Prepare a trainer guide if required

On the next page is a typical comprehensive diagram of the system for designing a course or programme. Most of these charts adopt a systems approach to course design that allows for the same steps to be gone over in round after round so that the course may be improved after each implementation.
Flow chart used to describe a system of course design

The figure below illustrates the relationship between needs analysis process (that we did in Module 2), and the specifically design phase of a training programme or course and associated activities such as designing trainer guides and evaluating the programme.

**Steps in planning and designing an outcomes-based training programme (Coetzee, 2006)**
Here is another way of looking at planning and design – a very practical checklist on what you need to do to plan, design and run a course (Aitchison, 2007, pp. 22-23):

### Checklist: Planning a training programme or course

<table>
<thead>
<tr>
<th></th>
<th>What evidence is there that the training programme or course is needed?</th>
<th>Description of how training needs discovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>What is the context of this programme or course?</td>
<td>Describe briefly</td>
</tr>
<tr>
<td>3</td>
<td>What is the target group?</td>
<td>Who is it for?</td>
</tr>
<tr>
<td>4</td>
<td>Who are the actual participants?</td>
<td>Who has enrolled? What are they like? What is their profile?</td>
</tr>
<tr>
<td>5</td>
<td>What is the purpose or aim of the programme or course?</td>
<td>Does this aim relates well to a broader training programme? Does it meet the needs identified in 1.</td>
</tr>
<tr>
<td>6</td>
<td>What are the learning outcomes/educational objectives of the event?</td>
<td>Outcomes/objectsives are appropriate and are realistic and realisable in time given</td>
</tr>
<tr>
<td>7</td>
<td>Have you got any necessary authorization?</td>
<td>Requisitions for venue, equipment and materials are submitted in time</td>
</tr>
<tr>
<td>8</td>
<td>What is your plan for the management and administration of the event</td>
<td>Who are the staff? What will they do?</td>
</tr>
<tr>
<td>9</td>
<td>How will the actual running of the programme or course be controlled?</td>
<td>To what extent will participants have a say in the running of the programme or course?</td>
</tr>
<tr>
<td>10</td>
<td>What broad educational approaches or strategies will you use?</td>
<td>Do the approaches fit your educational beliefs and ideology? Will they fit the beliefs and ideologies of the participants? Do they fit in with the outcomes/objectsives?</td>
</tr>
<tr>
<td>11</td>
<td>What is the timetable for the programme or course?</td>
<td>Is the amount of time allocated for each component and activity (including breaks) appropriate?</td>
</tr>
<tr>
<td>12</td>
<td>What is the content?</td>
<td>Is the content relevant and reasonably selected in relation to the objectives?</td>
</tr>
<tr>
<td>13</td>
<td>Does the instructional sequence seem reasonable?</td>
<td>Is each stage clearly identifiable and is the content divided into manageable units?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>14</strong></td>
<td>What appropriate educational methods and techniques will you use that are relevant to the objectives?</td>
<td>What is the appropriate size of learner groups and what methods and techniques are appropriate for this size of group? Are instructions and questions to learners clear and concise? Is there suitable preparation of the learner (including feelings, motivation, study and enabling skills)? Are there sufficient activities and interactions with materials? Is there provision for feedback to learners on their learning and for their own reflection on their learning?</td>
</tr>
<tr>
<td><strong>15</strong></td>
<td>What appropriate facilities, media and resources will be used and when?</td>
<td>Has the general environment, venue, furniture, seating, equipment, materials, catering etc. been prepared for, tested and got ready? Do the trainers know how to use the technology?</td>
</tr>
<tr>
<td><strong>16</strong></td>
<td>Has the environment/venue been made as conducive to learning as possible?</td>
<td>Does your plan take into account the learning environment (including locality, venue, size, acoustics, emotional climate, etc.)?</td>
</tr>
<tr>
<td><strong>17</strong></td>
<td>How will learning be assessed?</td>
<td>Will suitable assessment methods be used which take all objectives into account? How will assessment results be communicated to learners? Have you taken into account what impact particular assessment methods will have on learners?</td>
</tr>
<tr>
<td><strong>18</strong></td>
<td>How are you going to report on the progress of a group of learners</td>
<td>What report or reports are expected and who are they for?</td>
</tr>
<tr>
<td><strong>19</strong></td>
<td>How will the programme or course be evaluated?</td>
<td>Learner evaluation? Staff evaluation? Organisation evaluation? Sponsor evaluation? Who runs the evaluation?</td>
</tr>
<tr>
<td><strong>20</strong></td>
<td>How will you finally report on the programme or course?</td>
<td>What essential details must be included in the report. (e.g. purpose, type of event, facilitator, participants, date, venue, observed outcomes, strengths and weaknesses)?</td>
</tr>
<tr>
<td><strong>21</strong></td>
<td>How and when will you reflect critically on your own performance as an trainer in the design and implementation?</td>
<td></td>
</tr>
<tr>
<td><strong>22</strong></td>
<td>Does the plan appear flexible enough to deal with reasonable contingencies?</td>
<td></td>
</tr>
<tr>
<td><strong>23</strong></td>
<td>Is the layout of the plan or trainer guide clear, uncomplicated and clearly printed?</td>
<td>Could another trainer easily use it?</td>
</tr>
<tr>
<td><strong>24</strong></td>
<td>Will documentation/records be suitably stored or archived</td>
<td>Will another trainer easily find this material?</td>
</tr>
</tbody>
</table>
Planning and design of courses in the structure of the whole course and within this Module

This introduction has served to give a broad overview of the planning and design process. The table below outlines how these issues will be dealt with in this module and in the course as a whole.

<table>
<thead>
<tr>
<th>Analyse system in which trainees operate, identify tasks performed and assess training needs</th>
<th>In Module 1 we looked at the general context within which training takes place and in Module 2 you looked at Needs analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess the specific training needs and identify a learner profile of the actual learners coming on the course</td>
<td>This we will do next in this module.</td>
</tr>
<tr>
<td>Formulate learning outcomes and align them with national standards</td>
<td>This will follow in the following section of this Module.</td>
</tr>
<tr>
<td>Plan the steps of the curriculum (that is, the design of the programme or course as a whole including learner support)</td>
<td>These are dealt with in this Module.</td>
</tr>
<tr>
<td>Sequence learning content</td>
<td></td>
</tr>
<tr>
<td>Plan for the teaching/instruction/facilitation on the course</td>
<td>The practice of this will be looked at in Module 4.</td>
</tr>
<tr>
<td>Develop an assessment strategy</td>
<td>The practice of this will be looked at in Module 4.</td>
</tr>
<tr>
<td>Decide on the training methods</td>
<td>Module 5 covers this.</td>
</tr>
<tr>
<td>Design or procure learning materials (including a learner guide)</td>
<td>This will be discussed briefly in this Module.</td>
</tr>
<tr>
<td>Plan for the staffing and implementation of the course</td>
<td>This is discussed briefly in this Module. Module 6 also has pertinent information on management and administration.</td>
</tr>
<tr>
<td>Evaluate the learning programme</td>
<td>Module 6 examines this.</td>
</tr>
</tbody>
</table>
Developing a Learner profile

A sound learner-centered approach to training design means that the needs, level and preferences of the targeted learners will largely determine the content, structure, methods and language and educational level of any programme or course.

The most useful educational experiences depend upon an accurate assessment of the learners and their situation. We need to know what the learners are ready to learn, what they need to learn and what they are motivated to learn.

Some of this information may already have been determined in the prior needs analysis process (See Module 2). Usually, however the needs analysis stage gathers fairly general information, perhaps about a whole broad group of employees. What is now required is information about a very specific group of people — those who are going to attend the actual programme or course you are designing or running. Who are these specific learners and what are their needs?

There is a preliminary step and three steps to identifying educational needs:

1. Select a broad focus
2. Collect information
3. Analyse information
4. Interpret information

The identifying of educational needs is a specific step in the designing of educational events. It is something which we do in preparation for a specific event, but it is also something which a good trainer will do during and following an event. On the basis of his or her daily experiences the trainer will make written or mental notes of apparent educational needs.

Select a broad focus

The broad focus suggests the general content area or underlying concern which motivates the particular course. Often the broad focus will be determined by someone other than the trainer. An organization may set the focus, or a group may come with a request, e.g., “We need help in running committee meetings better.” Setting the broad focus will help to do the following:

1. Indicate what information to collect
2. Indicate who the course is likely to be arranged for.
3. Indicate the time and the place
4. Indicate who else might be involved in planning.
Collect information

You will have to decide:

1. What information you require;
2. What form you want it in (anecdotes or statistics?), and
3. How you are going to collect it.

Some kinds of information you may need

The general focus will determine the kinds of information which will be needed to identify the educational needs of the learners. Information about arrangements, facilities, and the situation of the trainers may also be required. Here are some of the kinds of information you should consider collecting:

<table>
<thead>
<tr>
<th>Who?</th>
<th>The Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a) Basic demographic information – ages, sex, geographical factors (urban/rural; local/from afar), socio-economic status, language, cultural background, educational background, employment status, access to information and communications technology</td>
</tr>
<tr>
<td></td>
<td>b) Attitudes and values</td>
</tr>
<tr>
<td></td>
<td>c) Knowledge: what do they know and what do they want to know?</td>
</tr>
<tr>
<td></td>
<td>d) Understanding and perception – of words, concepts, of self, others and the world</td>
</tr>
<tr>
<td></td>
<td>e) Behaviour and skills: physical (any disabled), relational</td>
</tr>
<tr>
<td></td>
<td>f) Mental skills, academic abilities</td>
</tr>
<tr>
<td></td>
<td>g) Relationships: learner-learner and learner-trainer</td>
</tr>
<tr>
<td></td>
<td>h) Current pressures concerns and problems</td>
</tr>
<tr>
<td></td>
<td>i) Expectations</td>
</tr>
<tr>
<td>The Trainers</td>
<td>a) Abilities</td>
</tr>
<tr>
<td></td>
<td>b) Expectations</td>
</tr>
<tr>
<td></td>
<td>c) Desires</td>
</tr>
<tr>
<td>The body or organization</td>
<td>a) Organizational needs</td>
</tr>
<tr>
<td></td>
<td>b) Programme needs</td>
</tr>
<tr>
<td></td>
<td>c) New and planned developments</td>
</tr>
<tr>
<td>When?</td>
<td>a) The time of the year</td>
</tr>
<tr>
<td></td>
<td>b) The time of the week</td>
</tr>
<tr>
<td></td>
<td>b) The time of the day</td>
</tr>
<tr>
<td></td>
<td>c) The length of time</td>
</tr>
<tr>
<td>What?</td>
<td>a) Resources available: materials, equipment and people</td>
</tr>
<tr>
<td></td>
<td>b) Physical arrangements: rooms, furniture, etc.</td>
</tr>
</tbody>
</table>
A Learner profile checklist (adapted from Coetzee, 2002)

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Demographic information:</strong></td>
<td>• What is the average experience of the learners?</td>
</tr>
<tr>
<td></td>
<td>• What is the ratio of male and female learners? Indicate the percentages.</td>
</tr>
<tr>
<td></td>
<td>• How many learners are employed?</td>
</tr>
<tr>
<td></td>
<td>• In what different fields are the learners employed?</td>
</tr>
<tr>
<td></td>
<td>• Where do most of the learners live? In rural or urban areas?</td>
</tr>
<tr>
<td></td>
<td>• What is the ratio of the different cultural groups? Indicate the percentages.</td>
</tr>
<tr>
<td><strong>b. Language level:</strong></td>
<td>• Are they first-language, second-language or third language English speakers? Indicate the percentages.</td>
</tr>
<tr>
<td></td>
<td>• Do the learners have access to tape recorders, video recorders, CD players, DVD players, computers with CD-ROM or DVD?</td>
</tr>
<tr>
<td><strong>c. Access to technology:</strong></td>
<td>• What is the highest level of education?</td>
</tr>
<tr>
<td></td>
<td>• What are the prerequisites for each of the courses or subjects?</td>
</tr>
<tr>
<td><strong>d. Entry level of the learners:</strong></td>
<td>• Why have the learners enrolled for the course?</td>
</tr>
<tr>
<td></td>
<td>• How does the programme or course relate to their work?</td>
</tr>
<tr>
<td></td>
<td>• What is the learners' attitude towards the programme?</td>
</tr>
<tr>
<td></td>
<td>• What are the hopes and fears of the learners?</td>
</tr>
<tr>
<td><strong>e. Motivational information:</strong></td>
<td>• What previous experience do the learners have of learning by means of a study text?</td>
</tr>
<tr>
<td></td>
<td>• How much time do the learners have available to study and master a course or programme?</td>
</tr>
<tr>
<td></td>
<td>• Do the learners have enough time to study?</td>
</tr>
<tr>
<td></td>
<td>• Do they have enough resources for reference purposes, if necessary?</td>
</tr>
<tr>
<td><strong>f. Information on learning:</strong></td>
<td>• What do most learners know about the learning programme?</td>
</tr>
<tr>
<td></td>
<td>• Do they have any previous experiences in this field or domain?</td>
</tr>
<tr>
<td></td>
<td>• What personal interests and experiences relevant to the learning programme do the learners have?</td>
</tr>
</tbody>
</table>

Another part of the profile that could be developed is what are described as “learning styles” (See Module 1 pages 56 to 59). Learning styles are the characteristic ways in which individuals tend to learn. Thus, for example, some people will respond better to verbal instruction, others will learn best from visually enriched learning. Some will learn best by doing or applying, others will be most interested in theoretical material. Many comprehensive programmes or courses start with exercises which help learners and trainers determine what the individual learning styles are.
Some information collecting devices and procedures

<table>
<thead>
<tr>
<th>Interview</th>
<th>Open-ended interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaire</td>
<td>Interview schedule</td>
</tr>
<tr>
<td>Open-ended question, sentence theme</td>
<td></td>
</tr>
<tr>
<td>Unfinished stories and incidents</td>
<td></td>
</tr>
<tr>
<td>Observation and recording of performance</td>
<td></td>
</tr>
<tr>
<td>Special assignments and exercises</td>
<td></td>
</tr>
<tr>
<td>Survey</td>
<td></td>
</tr>
<tr>
<td>Diaries</td>
<td></td>
</tr>
<tr>
<td>Check lists or ratings</td>
<td>preferences</td>
</tr>
<tr>
<td></td>
<td>interests</td>
</tr>
<tr>
<td></td>
<td>activities</td>
</tr>
<tr>
<td></td>
<td>priorities and values</td>
</tr>
<tr>
<td></td>
<td>problems and needs</td>
</tr>
<tr>
<td>Standardized tests</td>
<td></td>
</tr>
<tr>
<td>Guessing</td>
<td></td>
</tr>
<tr>
<td>Reflection and recollection</td>
<td></td>
</tr>
</tbody>
</table>

Analyze the information

Analyzing the information which you have collected is a process of asking questions of it and of letting it speak to you.

There are several things you can do:

1) Collate the information: Sort it and put it together according to appropriate or planned categories, e.g., there are 10 females and 20 males.

2) Look for inherent categories: For example groups of people with interests in training, information and communications technology or career development may appear in the information.

3) Look for patterns and relationships: “What is the relationship between age and interest in self development?” for example.

The following might be the result of an analysis of information collected in regard to the broad focus “public service communications with the mass print media”.

15 people said that they read newspapers fairly frequently, 10 occasionally and 5 hardly ever.

Their average reading level is Grade 10.
Most people reported that the main actual reading was: sensational newspaper news stories, picture stories, movie magazines, sports, murder mysteries.

People who read frequently report that they do so in order to be able to discuss the things being discussed by their friends.

Most people reported that found it difficult making time to read.

English is the first language of only 7 of the participants.

Some 17 people listen to 2 news broadcasts or more a day, 6 listen to one news broadcast a day and 7 listen to no news broadcasts.

25 regularly watch television.

14 people thought Lulu was the President or leader of Brasil, 9 thought Lulu was pop singer and 7 thought Lulu was somebody involved in a celebrity sex scandal.

**Interpret the information**

To interpret the information is to try and answer the question, “What does the information mean?” You want to decide what the learner profile indicates about educational needs. Usually the patterns of information which have been revealed through the process of analysis are open to several interpretations.

1) **Identify alternative explanations**

We may discover, for example, that a group of people reads fewer than average books. It may be because:

- they are thoroughly analytic readers who read to study
- they are slow readers
- they have no money to buy books
- they have less than average interest in reading.

2) **Select the most likely explanation**

What is the most likely cause of the patterns revealed in the information? The choice which we make from those alternatives suggested in the example above will lead to very different kinds of training events.

3) **State the result as an educational need**

You are now attempting to state as clearly as you can what you believe that the potential participants need to learn. Some needs will not be educational needs and cannot be met with a training event.
Returning to the example of a broad focus on “public service communications with the mass print media” your analysis could lead to the identification of such needs as the following:

- Need to explore the values of keeping themselves informed about current events
- Need to know more about the rest of the world
- Need to develop skills and attitudes relevant to the critical processing of information in the media about current events
- Need to develop an interest in comparing the reporting of current events in different newspapers and magazines
- Need to understand what kind of news about the public service would be of interest to the media
- Need to know how to get stories about their department into the mass print media
- Need to understand how damaging miscommunication can be
- Need to understand who controls the mass print media.
- Need for reading glasses.
- Need to improve reading comprehension
- Need to increase vocabulary
- Need to be able to distinguish between news and incidental human interest or sensational articles.

and so forth.
Preparing a purpose

The purpose of an educational event is prepared on the basis of your identification of educational needs. An event will be planned to help the learners fulfill one or possibly more of those needs.

There are three steps in preparing a purpose.

**Select the purpose**

Consider the range of possible purposes as they grow out of the needs identified and select one of them.

**Write the purpose**

Once you have selected the purpose, write it out. This is particularly important for both an individual and a team. It necessitates that you really understand what you intend to do, and, in a team, that you have a shared understanding of the purpose.

**Test the purpose**

Assess the purpose by the following criteria and alter it as necessary.

The purpose is:

- **stated in terms of change** in knowledge, skill, behaviour, feelings, attitudes, etc.

- **based upon data**. What data is there to validate the purpose? What information has been overlooked, disallowed or excluded in formulating the purpose? What need does the purpose seek to meet? Is it a real need, a perceived need or both?

- **significant**. Does the purpose relate to a significant need? How significant is the purpose in relation to other needs, other possible purposes, the overall goals of the programme or organization? How significant is the purpose considered to be by the learner, the trainer, the organization?

- **specific**: Is the statement of the purpose specific enough to select appropriate learning experiences? Is it specific enough that there is no doubt or ambiguity about the intended learning outcomes? Is it specific enough to make it possible to evaluate the learning outcomes?

- **achievable**. What information is there to indicate that the learner has the capability or resources to achieve the purpose? What resources will be required of the trainer in order to achieve the purpose? Are these resources available? Does the purpose indicate an area in which change is possible?
• **measurable.** How will we be able to tell whether or not the purpose has been fulfilled? (Some changes are not directly observable. We may need to indicate what observable changes will be accepted as an indication that the unobservable changes have taken place.)

• **communicable.** Does the statement of purpose effectively and accurately communicate the intention of the people drafting it? If the purpose is going to be shared with the learners, will it be clear and meaningful to them?

• expresses **values.** That value assumptions seem to underly the purpose? Are these values explicit or do they need to be made more explicit? What differences are there in the values of the learner, the trainer, the organization which are relevant to or reflected in the purpose? Have these differences been taken into account?

A good, clear purpose is the corner stone of every design of a learning programme.

It takes a lot of time to develop, refine and obtain a common understanding of a purpose. In the long run, the time and energy invested in preparing the purpose will be repaid. Decisions and ideas for the design will come more easily and relevantly.

**Purposes, aims, goals, objectives and outcomes**

The terminology of training uses a variety of words to describe learning purposes or objectives. Many people use these terms interchangeably.

Generally the words **purpose, aim** or **goal** is broad term, covering what it is hoped to achieve in a programme or course.

An **objective** is much more specific and a programme or course may have many specific objectives.

The term **outcome** can be used in both a broad and specific sense. Generally its meaning is close to that of an objective.
Developing learning objectives or outcomes

Once you have identified training needs, you need to think about the outcomes you wish to achieve through training. This is an important activity, because the whole process that follows (not only in this design phase of the training, but also in the implementation phase and eventually in the evaluation phase) depends on the accuracy of this input. By “accuracy” we do not mean right or wrong outcomes, but meaningful and appropriate ones – outcomes that will address and solve the original problem, that is, the gap between what ought to be and what currently is.

An adequate needs analysis will have led to the development of a purpose statement of what the desired result of training should be. However, more specific objectives or outcomes needs to be developed because a statement of purposes is generally too broad to be of much help in the development of a set of procedures and activities that will lead to an effective learning experience. Developing more specific learning objectives helps explain and make more concrete the intention or purpose of the programme and its courses and modules.

**What is an outcomes-based approach to training?**

An outcomes-based approach is characterised by the following features:

- an emphasis on the results of learning (outcomes);
- a focus on learning by doing;
- a focus on what learners can do as well as learning of content;
- opportunities for the recognition of prior learning; and
- an emphasis on the applications of learning in new and different contexts.

Because an outcomes-based curriculum framework emphasises the outcomes of learning rather than prescribing the means or way of learning, in principle learners should be able to attain the learning outcomes through a wide range of means in a variety of contexts. Such an approach is therefore supposed to promote access to competence and accreditation by recognising that there are many different routes to obtaining knowledge and skills, and that the choice of “best route” for an individual will depend on a variety of circumstances, including the experience and learning that have occurred to date.

An outcomes-based approach is also usually characterised by the **clear specifications of the outcomes** to be achieved by a programme or course. These specifications are usually expressed in terms of measurable competences. (See Module 2, pages 25-26 and 31 to 33). Competencies are descriptions of performance which answer such questions as:
What do people have to be good at doing to be effective in their job?
How does an individual know that she or he is carrying out the job effectively?

Competence can be defined as the application of skills, knowledge and attitudes to tasks or combination of tasks to standards under operational conditions. As such competence does not refer to the unique characteristics of an individual worker, but rather serves as a measure against which individuals may be judged for the purposes of formal or informal evaluation and accreditation. A competency-based approach to training and education will be an integral part of the move towards a broader needs-based and outcomes-based approach to public service training and education.

In understanding an outcomes-based approach to education and training it is important to recognise that the approach is one that **emphasises** outcomes. This does not mean that other aspects of education and training – course content and processes for instance – are to be ignored. All good training is necessarily concerned with outcomes.
Activity 3.1: Learning outcomes

Go back to the beginning of Module 3 and read through the learning outcomes listed.

Consider the following questions:

♦ Who are these outcomes for?
♦ What existing learning is assumed to be in place?
♦ Identify the verbs ("do" and "know" words) in each of these outcomes.

These outcomes are meant for trainers. The verbs are the things you have to know and be able to do or to demonstrate after working thought this Module. After you have studied this Module you should be able to:

♦ Identify
♦ Describe
♦ Explain
♦ Formulate
♦ Align
♦ Create
♦ Select
♦ Plan
♦ Etc.

To achieve these particular outcomes it is assumed that you already have considerable knowledge and skills, indeed general competence, in some kind of training occupation in which you will be able to practice the competencies described by the learning outcomes.

It is for this reason that most learning programmes comprise both theory and practice. Learners are therefore confronted not only with theoretical material, but they are also given opportunities to apply new knowledge and consequently practice new skills.
A Taxonomy of Learning Outcomes

In the 1950s Benjamin Bloom and associates published influential taxonomies of educational objectives in both the cognitive and affective domains. These taxonomies have remained a significant influence on competency and outcomes-based education and were found particularly useful for the design of assessment as they draw attention to a hierarchy of cognitive skills levels that need to be assessed in different ways. Recently Bloom’s taxonomy underwent a major review and was revised by Anderson and seven other associates. They produced a new two-dimensional table, known simply as The Taxonomy Table (reproduced on the following pages). The two dimensions are the cognitive process dimension and the knowledge dimension.

The horizontal cognitive process dimension uses the verbs:

- Remember;
- Understand;
- Apply;
- Analyse;
- Evaluate;
- Create

The vertical knowledge dimension consists of four types of knowledge:

- Factual;
- Conceptual;
- Procedural;
- Metacognitive

Each cell of the Taxonomy Table represents a different type of intended student learning and the objectives/outcomes placed within the different cells require different instructional approaches and means of assessment. The Taxonomy Table is a useful tool for planning both instruction and assessment and assists in ensuring that there is a strong alignment and connection between the objectives/outcomes, instruction and assessment in the curriculum.

The Taxonomy Table is used as follows:

- Place all the objectives in a given curriculum, course or course module in the appropriate cells of the Taxonomy Table.
- Analyse the assessments required for each objective and write the assessments into the appropriate cells.
- Analyse the major instructional activities and related materials in terms of the Taxonomy Table and write the appropriate instructional activities into the appropriate cells.

At this point in the process, there are some cells that contain one or more objectives, related instructional activities and materials, and appropriate assessments. Blank cells need to be examined to see whether important objectives and instructional and assessment activities have been omitted from the course.
### The Cognitive process dimension

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Recognising</td>
<td>Interpreting</td>
<td>Executing</td>
<td>Differentiating</td>
<td>Checking</td>
<td>Generating</td>
</tr>
<tr>
<td>Recalling</td>
<td>Exemplifying</td>
<td>Implementing</td>
<td>Organising</td>
<td>Critiquing</td>
<td>Planning</td>
</tr>
<tr>
<td></td>
<td>Classifying</td>
<td>Summarising</td>
<td>Attributing</td>
<td></td>
<td>Producing</td>
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<td></td>
<td></td>
<td>Inferring</td>
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<td></td>
<td></td>
<td>Comparing</td>
<td></td>
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<td></td>
<td></td>
<td>Explaining</td>
<td></td>
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</tbody>
</table>

### The Knowledge dimension

#### A. Factual knowledge
- Aa. Knowledge of terminology
- Ab. Knowledge of specific details and elements

#### B. Conceptual knowledge
- Ba. Knowledge of classifications and categories
- Bb. Knowledge of principles and generalisations
- Bc. Knowledge of theories, models and structures

#### C. Procedural knowledge
- Ca. Knowledge of subject-specific skills and algorithms
- Cb. Knowledge of subject-specific techniques and methods
- Cc. Knowledge of criteria for determining when to use appropriate procedures

#### D. Meta-cognitive knowledge
- Da. Strategic knowledge
- Db. Knowledge about cognitive tasks, including appropriate contextual and conditional knowledge
- Dc. Self-knowledge
# The Cognitive Process Dimension

<table>
<thead>
<tr>
<th>Categories &amp; Cognitive Processes</th>
<th>Alternative names</th>
<th>Definitions and examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Remember – retrieve relevant knowledge from long-term memory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Recognising</td>
<td>Identifying</td>
<td>Locating knowledge in long-term memory that is consistent with presented material</td>
</tr>
<tr>
<td>1.2 Recalling</td>
<td>Retrieving</td>
<td>Retrieving relevant knowledge from long-term memory</td>
</tr>
<tr>
<td><strong>2. Understand – construct meaning from instructional messages, including oral, written and graphic communication</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Interpreting</td>
<td>Clarifying, paraphrasing, representing, translating</td>
<td>Changing from one form of representation (e.g. numerical) to another (e.g. verbal)</td>
</tr>
<tr>
<td>2.2 Exemplifying</td>
<td>Illustrating, instantiating</td>
<td>Finding a specific example or illustration of a concept or principle</td>
</tr>
<tr>
<td>2.3 Classifying</td>
<td>Categorising, subsuming</td>
<td>Determining that something belongs to a category</td>
</tr>
<tr>
<td>2.4 Summarising</td>
<td>Abstracting, generalising</td>
<td>Abstracting a general theme or major points</td>
</tr>
<tr>
<td>2.5 Inferring</td>
<td>Concluding, extrapolating, interpolating, predicting</td>
<td>Drawing a logical conclusion from presented information</td>
</tr>
<tr>
<td>2.6 Comparing</td>
<td>Contrasting, mapping, matching</td>
<td>Detecting correspondences between two ideas, objects, and the like</td>
</tr>
<tr>
<td>2.7 Explaining</td>
<td>Constructing models</td>
<td>Constructing a cause-and-effect model of a system</td>
</tr>
<tr>
<td><strong>3. Apply – carry out or use a procedure in a given situation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Executing</td>
<td>Carrying out</td>
<td>Applying a procedure to a familiar task</td>
</tr>
<tr>
<td>3.2 Implementing</td>
<td>Using</td>
<td>Applying a procedure to an unfamiliar task</td>
</tr>
<tr>
<td><strong>4. Analyse – break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 Differentiating</td>
<td>Discriminating, distinguishing, focusing, selecting</td>
<td>Distinguishing relevant from irrelevant parts or important from unimportant parts of presented material</td>
</tr>
<tr>
<td>4.2 Organising</td>
<td>Finding coherence, integrating, outlining, parsing, structuring</td>
<td>Determining how elements fit or function within a structure</td>
</tr>
<tr>
<td>4.3 Attributing</td>
<td>Deconstructing</td>
<td>Determine a point of view, bias, values, or intent underlying presented material.</td>
</tr>
</tbody>
</table>
### 5. Evaluate – make judgements based on criteria and standards

<table>
<thead>
<tr>
<th>5.1 Checking</th>
<th>Coordinating, detecting, monitoring, testing</th>
<th>Detecting inconsistencies or fallacies within a process or product; determining whether a process or product has internal consistency; detecting the effectiveness of a procedure as it is being implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2 Critiquing</td>
<td>Judging</td>
<td>Detecting inconsistencies between a product and external criteria; determining whether a product has external consistency; detecting the appropriateness of a procedure for a given problem</td>
</tr>
</tbody>
</table>

### 6. Create – put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure

<table>
<thead>
<tr>
<th>6.1 Generating</th>
<th>Hypothesising</th>
<th>Coming up with alternative hypotheses based on criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2 Planning</td>
<td>Designing</td>
<td>Devising a procedure for accomplishing some task</td>
</tr>
<tr>
<td>6.3 Producing</td>
<td>Constructing</td>
<td>Inventing a product</td>
</tr>
</tbody>
</table>
## The Knowledge Dimension

<table>
<thead>
<tr>
<th>Major types and subtypes</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Factual knowledge</strong> – the basic elements students must know to be acquainted with a discipline or solve problems in it</td>
<td></td>
</tr>
<tr>
<td>Aa. Knowledge of terminology</td>
<td>Technical vocabulary, symbols</td>
</tr>
<tr>
<td>Ab. Knowledge of specific details and elements</td>
<td>Major organisational resources, reliable sources of information</td>
</tr>
<tr>
<td><strong>B. Conceptual knowledge</strong> – the inter-relationships among the basic elements within a larger structure that enable them to function together</td>
<td></td>
</tr>
<tr>
<td>Ba. Knowledge of classifications and categories</td>
<td>Forms of business ownership, taxonomic organisation of department</td>
</tr>
<tr>
<td>Bb. Knowledge of principles and generalisations</td>
<td>Theories of development, ecological organisation</td>
</tr>
<tr>
<td><strong>C. Procedural knowledge</strong> – how to do something, methods of inquiry, and criteria for using skills, algorithms, techniques and methods</td>
<td></td>
</tr>
<tr>
<td>Ca. Knowledge of subject-specific skills and algorithms</td>
<td>Skills used in planning drawings, whole-number division algorithm</td>
</tr>
<tr>
<td>Cb. Knowledge of subject-specific techniques and methods</td>
<td>Interviewing techniques, scientific method</td>
</tr>
<tr>
<td>Cc. Knowledge of criteria for determining when to use appropriate procedures</td>
<td>Criteria used to judge the feasibility of using a particular method to estimate costs</td>
</tr>
<tr>
<td><strong>D. Metacognitive knowledge</strong> – knowledge of cognition in general as well as awareness and knowledge of one’s own cognition</td>
<td></td>
</tr>
<tr>
<td>Da. Strategic knowledge</td>
<td>Knowledge of outlining as a means of capturing the structure of a unit of subject matter in a textbook, knowledge of the use of heuristics</td>
</tr>
<tr>
<td>Db. Knowledge about cognitive tasks, including appropriate contextual and conditional knowledge</td>
<td>Knowledge of the types of tests particular trainers administer, knowledge of the cognitive demands of different tasks</td>
</tr>
<tr>
<td>Dc. Self-knowledge</td>
<td>Knowledge that mathematics is a personal weakness, but writing reports is a strength; awareness of one’s own knowledge level</td>
</tr>
</tbody>
</table>

Activity 3.2: Using The Taxonomy Table yourself

Having read through The Taxonomy Table, do you think you could start to analyse one of the courses or course modules you teach and place each intended outcome or objective in the correct cell or cells of The Taxonomy Table? Then see whether you have appropriate instructional and assessment activity in the appropriate cells too. Then look for the gaps.

- Place all the objectives (outcomes) in the course or course module in the appropriate cells of the Taxonomy Table.
- Analyse the assessments required for each objective and write the assessments into the appropriate cells.
- Analyse the major instructional activities and related materials in terms of the Taxonomy Table and write the appropriate instructional activities into the appropriate cells.
- Look for cells that contain one or more objectives, related instructional activities and materials, and appropriate assessments.
- Look for blank cells and consider whether important objectives and instructional and assessment activities have been omitted from the course.
Determining learning outcomes in the context of outcomes-based education and national qualification frameworks

Increasingly, training providers are being required to move towards a demand-driven and outcomes-based approach to their work. The move towards an outcomes-based approach to public service training and education will be influenced by current developments of National Qualifications Frameworks in African countries.

Outcomes-based training and standards

The clear specification of outcomes is often done in relation to standards. Essentially standards are officially recognised sets of outcome specifications that, when achieved, can enable the learner to gain some kind of recognition or certification. A standard, then, is a registered statement of desired education and training outcomes and its associated assessment criteria together with with administrative and other information as specified in the regulations.

Standards are normally expressed as:

- A set of performance criteria which are observable, measurable and assessable;
- A desired outcome of the competence.

This does not imply, of course, that formal whole qualifications that are not standards-based will no longer be used as criteria for recruitment or promotion. For many positions within the public service, the possession of appropriate qualifications and/or experience will continue to be essential. In many countries in the world standards based courses and certification are found mainly in the vocational field but not in schooling or higher education.

One of the major incentives to use standards is that the learning outcomes of particular courses and qualifications are publicly visible and this makes for ease of comparing what competencies applicants for posts possess across sectoral and national boundaries.

Understanding the terminology of standards

Different countries as well as international bodies use a variety of terminology in relation to standards. However, all standards tend to have a similar format and basic vocabulary.

The example of terminology I am going to present here is that used by the South African Qualifications Authority (SAQA). The South African Qualifications Authority Act (Act No. 58 of 1995) defines unit standards as the:
• **registered statements** of desired education and training outcomes and
• their **associated assessment criteria**, describing the quality of the expected performance, together with
• administrative and other **information** specified in the National Standards Body regulations

The purpose of a unit standard is to provide guidance to the:
• **Assessor** as to the evidence that must be gathered during assessment
• **Learner** as to the learning outcomes that must be achieved
• **Provider** and/or materials designer as to the learning materials or learning experiences to be prepared to assist learners in reaching competence.

In other words, a standard is an end-statement of the achievement of a certain competence, as well as being a building block for possible qualifications.

*Note that the South African terminology calls registered standards "unit" standards with the sense that this standard is the smallest unit that can be given credit towards some qualification.*

The SAQA format for a unit standard is as follows. A unit standard should consist of:

1. a title (and a unit standard number)
2. a level on the NQF
3. the credit attached to the unit standard
4. the field and sub-field of the unit standard
5. the purpose of the unit standard
6. learning assumed to be in place before the unit standard is commenced
7. the specific outcomes to be assessed
8. the assessment criteria
9. the range statements as a general guide for the scope, context and level being used for the unit standard, and
10. a ‘notes’ category which must include the critical cross-field outcomes supported by the unit standard; references to essential embedded knowledge; and may include other supplementary information on the unit standard.

Below is a more detailed description of these categories.
Parts of a Unit Standard

1. Unit standard title
   Form:
   - The title of the unit standard is unique
   - That is, the title is different from any other title registered on the NQF.
   - The title provides a concise yet comprehensive and pointed indication of the contents of the unit standard.
   - The title contains a maximum of 100 characters including spaces and punctuation.

2. Unit standard level
   - The level assigned to the unit standard is appropriate in terms of the complexity of learning required to achieve the standard (as described in SAQA’s Level Descriptors).
   - The level is appropriate in relation to the learning pathway/s within which the unit standard is located.
     **Note:** Fundamental or Core standards in particular may form part of many different learning pathways.

3. Credit attached to the unit standard
   - The definition of a credit is that 1 credit = 10 notional (assumed) hours of learning.
   - The credit assignment reflects the average length of time the average learner might take to complete the learning leading to the achievement of the standard.

4. Field and sub-field of the unit standard
   - Unit standards must be located within the sub-field and organising field (Agriculture and nature conservation/ Culture and arts/ Business, commerce and management studies/ Communication studies and language/ Education, training and development/ Manufacturing, engineering and technology/ Human and social studies/ Law, military science and security/ Health sciences and social services/ Physical, mathematical, computer and life sciences/ Services/ Physical planning and construction).
   - Where there is more than one sub-field or organising field to which the standard might apply, this must be clearly indicated and justified, either here or in the brief of the Standards Generating Body that generated the standard.

5. Purpose of the unit standard
   - The format of entries under the heading Purpose follow on from the statement:
     ‘Persons credited with this unit standard are able to...’
   - The Purpose of a unit standard includes its specific outcomes together with a concise statement of the contextualised purpose of the unit standard and what its usage is intended to achieve for:
     – the individual
     – the field or sub-field
– social and economic transformation

- These entries are phrased as:
  
  **Verb + object + modifying phrase(s) (if required)**

- The purpose statement succinctly captures what the learner will know and be able to do on the achievement of the unit standard.

- The sub-outcome entries are ‘bulleted’ for easy reading purposes.

6. **Learning assumed to be in place**

- There is a clear relationship between the credit value of the standard and the learning assumptions.

- [This is the learning assumed to be in place if the learning required to achieve the standard is to be completed in the assigned credit time]

- The statement captures and reflects the knowledge, skill and understanding ‘building blocks’ which are assumed to be in place and which support the learning towards the achievement of the unit standard under consideration.

7. **Specific Outcomes**

- The format of entries under the heading Specific Outcomes follows on from the statement:

  **Persons credited with this unit standard are able to:**

  and these entries are phrased as:

  **Verb + noun + modifying phrase(s)**

  **Examples:**

  ‘Analyse and determine remedial action for continuous production process problems’

  ‘Describing how information technology can be integrated into adult basic education and training’

  Analyse remedial action for ...

  ‘Determine the ...’

- There are usually between 4 and 6 specific outcomes. [More than six may indicate that there is more than one purpose that the standard is trying to address. Fewer than four may indicate that the purpose of the unit standard is too narrow].

- The specific outcomes together reflect and capture the purpose of the unit standard in ways that are measurable and verifiable.

- The specific outcome statements focus on **competence outcomes** and avoid describing specific procedures or methods used in the demonstration of competence. This ensures that unit standards:

  – have broad and inclusive applicability

  – avoid frequent review and overhaul because of procedural or methodological shifts in tendencies

  – focus on competence outcomes for learning and performance, not descriptions of tasks or jobs

- The specific outcomes avoid evaluative statements where possible. [Statements reflecting the quality of performance are located in the assessment criteria].

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8. **Assessment criteria**

- The format of entries under the heading Assessment criteria follow on from the statement:
  
  **We will know that you are competent to...** [insert specific outcome] **if or when...** [insert assessment criterion]

- Where there is a product, the assessable or measurable criteria for the product may include:
  - accuracy
  - finish / presentation
  - completeness (written information)
  - legibility (written information)
  - clarity (written / spoken information)
  - availability for use / location

- Where work organisation / work role is critical the assessable or measurable criteria for the way work is carried out may include:
  - time / speed / rate
  - schedule
  - procedures involving processes or methods
  - cost effectiveness
  - user specifications or needs
  - optimisation of resources
  - health and safety
  - hygiene
  - confidentiality / security
  - dress / appearance
  - language and behaviour
  - creation and maintenance of effective relationships

- The criterion statement sets the guidelines for developing particular assessment tasks at learning programme or services level rather than reflecting check lists for one or more assessment instruments.

- The specific outcome statements focus on competence outcomes and avoid describing specific procedures or methods used in the demonstration of competence. The specific outcomes avoid evaluative statements where possible.

- The criteria capture the requirements for fair, valid and reliable assessment procedures that make use of tools and methods appropriate to the organising field, sub-field, level, category and the unit standard being registered.

- The assessment criteria capture the underlying and embedded knowledge base that allows the learner to reflect achievement of the unit standard (through the reflective and repetitive application of that knowledge, skill, ability and value achievement within a range of contexts).

- The assessment criteria must be sufficiently transparent to ensure ease of understanding across a range of learning providers, learning services and learners.
9. Range statements
   • The range statements relate directly to specific outcomes, assessment criteria or even the standard.
     Note: Not all specific outcomes or assessment criteria require range statements.
   • There must be a clear relationship between range statements, the specific outcomes, the purpose of the unit standard, and the assessment criteria delineated for the unit standard.

10. Notes
    • This category contains:
      – General Notes
      – Critical cross-field outcomes as well as
      – Embedded knowledge.

**Embedded Knowledge:**
    • The format of entries follows on from the statements:
      – I/Learners can understand and explain...
      – I/Learners can apply...
and these entries are phrased as
  **Noun + modifying phrase(s)**
    • Where there is an embedded knowledge section it comprises a statement of the knowledge base required for competent performance and achievement of the unit standard, representing what the learner has to understand and be able to explain in the area (sub-field) at the particular level.
    • The embedded knowledge statement includes demonstrations of knowledge of the classificatory systems operating in the area and at the level of the unit standard.
    • The assessment criteria must be sufficiently transparent to ensure ease of understanding across a range of learning providers, learning services and learners.

**Examples:**
  ‘Integration of information technology and adult basic education and training’
  ‘Understanding of the Linnaean classificatory system in the identification of plants and animals’.

**Critical Cross-Field Outcomes:**
  • Critical Cross-Field Outcomes are in a ‘matrix’ format that indicates how each outcome is addressed in the standard. The matrix captures the relationship of the purpose, specific outcomes, and embedded knowledge to the critical cross-field outcomes.
  • The Critical Cross-Field Outcomes are the following:
    • identifying and solving problems in which responses display that responsible decisions using critical and creative thinking have been made
    • working effectively with others as a member of a team, group, organisation,
community
• organising and managing oneself and one’s activities responsibly and effectively
• collecting, analysing, organising and critically evaluating information
• communicating effectively using visual, mathematical and/or language skills in the modes of oral and/or written persuasion
• using science and technology effectively and critically, showing responsibility towards the environment and health of others
• demonstrating an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation
• contributing to the full personal development of each learner and the social and economic development of the society at large, by making it the underlying intention of any programme of learning to make an individual aware of the importance of:
  – reflecting on and exploring a variety of strategies to learn more effectively;
  – participating as responsible citizens in the life of local, national and global communities;
  – being culturally and aesthetically sensitive across a range of social contexts;
  – exploring education and career opportunities;
  – developing entrepreneurial opportunities

General Notes:
• The general notes act as a range statement for the whole standard. They include:
  – definitions of terms
  – legislation and regulations
  – general information of value to assessors and learning provider.

You can examine a large number of Unit Standards in this format on the SAQA website at:  http://www.saqa.org.za

Well written outcomes suggest assessment strategies

As is obvious from what is said about the the formulation of outcomes and standards, to a large extent, such formulation helps the trainer in deciding on the assessment strategy. Well written outcome specify what it is to be assessed and may well prescribe various forms of assessment. For course design this is particularly useful as in the designer works backwards to prepare instruction that prepares the learner for the assessment exercises to come.
Activity 3.3: Formulating some learning outcomes

Let us practice what we preach by affording you an opportunity to demonstrate whether you have the ability to formulate outcomes for your training programme as identified in your training needs assessment in Module 2.

Review Activity 2.5 (Develop a competency chart) on page 33 of Module 2. Study the competency chart you have drawn up for the trainer. Chose three of the most important competencies.

Formulate one outcome for each of the competences that you have identified.
**Writing outcomes**

Let us continue to take as an example for our discussion the competencies you developed for a trainer during your work on Module 2 on training needs assessment. You have revised some of these outcomes by doing the previous activity and you now know what they were meant to achieve.

This approach has a different emphasis to a more content focussed approach to instruction where learners are meant to remember, know, believe or understand the prescribed material. Outcomes-based learning puts the focus on what learners can actually do or demonstrate with what they remember, know, believe and understand.

In terms of this outcomes-driven approach, outcomes need to be formulated in accordance with the actions or demonstration process required from the learning experiences. Thus, in formulating learning outcomes for your programme or course, you as the trainer have to use observable action words such as “describe”, “apply”, “design”, “produce” and so on. These are specific verbs, rather than vaguer terms such as “know” and “understand” (even though you do sometimes have to use them too!).

Hence there are three requirements of a suitable outcome:

- An outcome needs to include a **verb** or “do” word. This will indicate the type of learning activity that will take place. This verb must indicate behaviour that can be observed and measured. Examples of these type of verbs are: “develop” (a business plan), “analyse” (a case study), “compile” (a budget), “formulate” (training needs), “build” (a wall), etc.

- An outcome also needs to include a **noun**. The noun indicates the object of the verb. From the above-mentioned examples the following will serve as nouns: “a business plan”, “a case study”, “a budget”, “training needs” and “a wall”. It is therefore not sufficient to expect learners only to develop, analyse, compile, formulate or build. There has to be an object that is linked to these verbs.

- Thirdly, an outcome must also include a **qualifier** that indicates the scope, standard or method through which something is done. Let us take the building of a wall as an example: after completion of the training programme the trainees will be able to “build” (verb) a “wall” (noun) “according to the relevant municipal regulations” (qualifier). We can also take the issue of training needs assessment as an example to learn about how to formulate outcomes: after studying the training needs assessment part of the training cycle (as you did in Module 2), you must be able to formulate (verb) training needs (noun) based on the discrepancy or gap experienced in the specific work place (qualifier).

A trainer can even add more qualifiers by indicating:
Training Manual Module 3: The planning and design of outcomes-based learning

- How the trainer will assess the outcomes
- How the learner will demonstrate the outcomes
- What learning methods will accompany the learning experience
- What administrative details have to be complied with.

The following is an example of a learning outcome that satisfies the requirements of outcomes as stated above:

Compile a draft outline of a Work Place Skills Plan for a small business of 50 employees according to the requirements of the Skills Development Act and the Skills Development Levies Act.

“Compile” – verb
“A workplace skills plan” – noun phrase
“According to the requirements of …” – qualifier

Values and attitudes built into outcomes

There is one more vital aspect of an outcome that we need to mention. It is the issue of values and attitudes that need to be included in the outcomes. Thus far in our discussion we have mainly concentrated on the knowledge and skills aspect of training outcomes. Learners do need to gain knowledge through training (e.g.: the bricklayer needs to know how bricks are made and what amounts of sand, water and cement it takes to mix top quality cement mix for building). Learners also need to acquire skills through training (the bricklayer needs to lay bricks in a straight line).

When one adds the dimension of values and attitudes in one’s outcomes the whole issue of learning becomes even more personal and individualised. By this we means that the employee starts thinking about (he or she reflects on) his or her abilities and also about the job at a higher level than previously. Let us take the example of the bricklayer again to demonstrate this point. A bricklayer, who knows everything involved in his or her craft, and who can do the job at a high standard, can even achieve a higher level of ability, which may include a value system of creating beauty through this craft. Attitudes that complement this value system may include self-confidence, pride and a feeling of achievement in doing this job. Values and attitudes operate at a higher level of development than knowing and doing.

One needs, however, to recognise the limitations of outcome specifications in relation to values and attitudes. Skills can usually be demonstrated, knowledge and understanding tested in some way, but demonstrating an inner disposition of the mind may be difficult.
Activity 3.4: Values and attitudes in outcomes

What do you think, will be the values and attitudes that you as the trainer would like to see developed among your trainers as learners? Are you thinking of a feeling of pride in doing their work, or their level of confidence when they work? Is the value system involved when working with clients.

Formulate an outcome or outcomes that contain the values and attitudes that you would like to see in your trainers (as learners).

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Planning the steps in a course and selecting the content

Unless training is based on carefully planned content, the success of the training programme will be at risk. As a trainer you will often come across other terms that are used, often inaccurately, to refer to content, such as “syllabus” and “curriculum” to indicate what has to be learnt in a training programme. These two terms are often used interchangeably though a syllabus is a list or outline of content whereas curriculum is a broader term referring to the whole the whole course including its syllabus and the course
content and the way and sequence it is taught and assessed.

“Content” refers to the subject matter and material that is to be learnt by the trainees, together with the different ways in which the trainer will convey it to the learners.

Selecting the content of a training programme is a vital procedure and can contribute to the success of such a programme. A programme designer (a role that you as a trainer will often play) normally has to rely on several sources from which to select the programme content. The relevant or applicable content then needs to be arranged in a specific sequence in order to achieve your outcomes. (Remember that this content must have a direct relationship with the outcomes you have formulated.)

Let us discuss these two activities connected with content or programme material, that is the selecting and sequencing of content).

There are a number of factors that influence a training practitioner’s selection of relevant training content. These factors will also influence the way the content is presented to the learners. The factors that influence content selection include the following:

**The subject or learning area**
Each subject or learning area has its own characteristic content, special vocabulary and concepts. The same applies to areas within an organisation, such as sales or service training (with the emphasis on delivery), human relations (with the emphasis on interpersonal relations) or management (with the emphasis on processes and structures).

**The type of learners**
Learners who will learn your programme content differ from each other. It is impossible to know exactly how each learner learns. There are, however, aspects of these learners that can be considered in the selection of programme content. This includes the learners’ culture and cultural differences within a group of learners, as well as language ability, which is their ability to understand the language of instruction and whether they can express themselves in that language. Learners’ learning styles also influence both the selection and the presentation of the content of the programme. What do you think the effect of the issue of language will be on your selection of content for the trainers training programme? – Will you select content with technical language? Have you thought about their level of schooling? Your prior development of a Learner profile will assist in this.

**The competence and strengths of the trainer(s)**
The ability of the facilitators of learning also has to be taken into consideration when selecting content. Let us assume that you as a trainer are skilled in computer-based instruction. Your skill and knowledge can thus be put to good use in selecting material that can be learnt through this method of instruction. When a trainer is an expert in his or her field, he or she is the right person to select the content for a specific programme. If, however, you feel that you are not an expert in the field in which you have to train employees, find an expert to help you select the relevant content.
The time available and resources available

Some content and methods of instruction simply will not be suitable if time is not sufficient. Often trainers have to make compromises in their selection of content and processes and between desirable content and exercises and what is possible in the time allowed.

The basic rule in all content and process selection is – will this content or this activity or practice actually be effective in the learning meeting the outcomes of the course (given whatever constraints exist in the learning environment). Other content and processes may be nice to have but need to be see as such, extras, and often, as the saying has it: "More is less!"
Activity 3.5: Selection of content

In the previous discussion we tried to make the factors that influence the selection of content relevant to the trainer. Let us build on that.

What, in your opinion, are the factors regarding subject, learners and facilitator that you would find relevant in your choice of content for the training of trainers training programme? List a few factors, such as the language proficiency of the learners (or possibly that of the trainer), or the language in which the existing material is written.

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Sources in which content can be found

The content of a training programme cannot simply be plucked out the air. A trainer needs to investigate relevant sources to find the content. The primary source (or first source to look into) is of course job data. Job data include job analysis reports, competency lists and performance work cards. It is useful to use a trainee’s job description as the point of departure. The reason is that a job description consists primarily of a series of job outcomes, that is, what an employee is expected to know and do. Can you see how this comment takes us back to where the training originated, namely the job description? This is where the gap or training need, as highlighted by the job description, between what an employee ought to do and what is actually done, originated.

Other documents that can assist the trainer in finding appropriate content for the programme include:

- technical and operator manuals
- standard operating procedures
- standard reference books
- textbooks to be found in libraries
- organisation and function manuals

In this age of information technology, one can also easily find useful and appropriate information on the Internet.

Guidelines to select relevant sources

In your investigation into these sources (e.g. manuals, reports, job descriptions and the Internet) you have to ask yourself two questions:

- Is this source directly related to the trainees’ job and performance requirements? (Or put in another way, would it be inappropriate to include content that does not apply to the specific job that the trainees will do?)

- Is the content found in this source essential to the development of the required performance? (Or, in other words, what reason is there to include content in the programme that will not directly contribute to the elimination of the knowledge or skills gaps that an employee is experiencing.)
A useful checklist to use when selecting content is by asking yourself the following question:

Is the information from this source (or the content that I wish to include in the programme)

- Essential (absolutely necessary to reach the outcome)
- Helpful (adding some value to the programme, like examples or case studies)
- Peripheral (not really essential or helpful, but nice to have and something that will increase the performance level of trainees, like a discussion given by some expert in the field)
- Unrelated (that which has no relevance to the programme outcomes)

**Learning outcomes also determine the selection of content**

We always have to keep in mind the fact that the selection of content for our programme should be largely determined by the learning outcomes we have formulated. The specific content should help achieve the desired outcomes. It is in fact a matter of designing backwards, starting from the end result or outcomes.

This simple diagram attempts to show you that the outcomes you formulate for your training programme will directly influence the learning content that you select to achieve those outcomes. You will notice that the arrow indicates movement from the outcomes to the learning content. Too often trainers first decide on the content of the programme and then decide on the effect (outcome) this will have on the trainees. Outcomes-based education has turned around this traditional way of doing it.

The arrow between the outcomes and the content moves in both directions. This means that learning outcomes influence content and that content is based on learning outcomes. This touches on a fundamental aspect of outcomes-based learning, namely that of learner-centredness. In outcomes-based learning the focus is on the learner learning, and not the trainer training. Outcomes therefore describe the result of learning, and the content is the vehicle to help assure that learning takes place and that outcomes are met. For this reason the content selection process is determined by the outcomes.
The following example will demonstrate how this works:

- **training need** = not able to make a garment (like a dress) according to a specific measurement taken from a commercial pattern.
- **outcome** = after training this worker, she or he will be able to make (verb) garments (noun) from patterns (qualifier)
- **content** = material on how to interpret a pattern, different types of patterns, how to measure with a measuring tape, and so on

### Sequencing the content of a training programme

It is impossible to convey to your trainees everything they need to know and to all at once. The trainer needs to organise and sequence the content of the training programme. Proper sequencing of content can make a significant difference to the efficiency and effectiveness of your learners’ learning experience.

There are quite a number of benefits involved in proper sequencing the training content. This will undoubtedly motivate the trainer not to neglect this aspect of training. The benefits include the following:

**It helps learners to make the transition from one learning experience to the next.**

Let me illustrate this point by taking this topic of the module as an example. You as a learner would have become very confused if there was no sequence to the material in this and previous topics. Let us assume that I, the trainer mixed it all up and started discussing content selection, then jumped to learner profiles, without even indicating to you, the learner, what I was doing. After providing some information or assessment, I then returned to information and activities on outcomes, and then returned to information on needs assessment. Can you imagine the mixed-up learning experiences you would have felt, with the resulting frustration, confusion and feeling of being totally lost.

**It ensures that the prerequisite skills and knowledge are acquired before new ones are introduced.**

In the content of this topic it is necessary to learn about needs assessment first before one can be confronted with outcomes, and later, the selection of course content. The first is a prerequisite for the second and the third.

**It breaks a whole lot of information into more digestable chunks**

Often there is simply too much information to comprehend as a whole. Breaking content up into sections or parts helps one memory handle the information and make sense of each part before moving on to the next.
Various ways to sequence content

There are various ways you can sequence your learning content as well as the learning experience as a whole. We will touch on a few of these.

<table>
<thead>
<tr>
<th>Sequences for content and processes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Whole-to-part</strong></td>
</tr>
<tr>
<td>Learners are first shown the whole or complete model or procedure (often with a diagram or graphic) and then instructed around the parts thereof. This type of sequencing can also be done by means of an advance organisers, which is a preview of the content to come that making use of existing knowledge.</td>
</tr>
<tr>
<td>A similar sequence is General to Specific Training starts with an overview of the topic and gradually works towards the specifics or detail.</td>
</tr>
<tr>
<td>Sometimes called deductive (from a general law explain the details)</td>
</tr>
<tr>
<td><strong>General-to-specific</strong></td>
</tr>
<tr>
<td><strong>Part-to-whole</strong></td>
</tr>
<tr>
<td>The separate parts of information are given and then the learner is shown how they fit together to form a whole. This is much like the approach one used to complete a jigsaw puzzle.</td>
</tr>
<tr>
<td>First the detail and then eventually the big picture.</td>
</tr>
<tr>
<td>Sometimes called inductive (from specific examples build up a generalization or law)</td>
</tr>
<tr>
<td><strong>Specific-to-general</strong></td>
</tr>
<tr>
<td><strong>Concrete-to-abstract</strong></td>
</tr>
<tr>
<td>Here a course starts with simple, observable, concrete learning experiences that are not open to much interpretation. Gradually the learners are exposed to more complex and abstract experiences.</td>
</tr>
<tr>
<td>Similar to Specific to General</td>
</tr>
<tr>
<td><strong>Known-to-unknown</strong></td>
</tr>
<tr>
<td>This starts with the material with which the learners are familiar and to which the new knowledge can be attached. Gradually the programme proceeds to material that is totally new.</td>
</tr>
<tr>
<td><strong>Unknown-to-known</strong></td>
</tr>
<tr>
<td>The learners are initially bombarded with new information and skills in order to arouse their interest and desire to know more. Sometimes new information is presented first and then explained by means of an example from everyday life (something with which the learners are familiar).</td>
</tr>
</tbody>
</table>
Here instruction is sequenced around each step of a procedure or process. An example would be instruction on how to use the Internet. First step: log on to a provider; second step: identify key words or phrases; step 3: do a search, and so on. This sequence also applies to programme content aimed at learners being able to assemble equipment. Certain skills training requires basic foundational skills to be learned first before other skills, which make use of them, can be taught.

Useful in telling a story and obviously used much in the teaching of history.

In practice trainers often mix the sequencing.

Look at this module and try and determine which sequences are used:

**Step by step** - The Manual as a whole follows a logical sequence for the development of implementation of a course or programme, as does this Module. The content and activities have been selected accordingly.

**Whole to part** - First we gave you an introduction and some graphic and checklist presentations of course design in the Introduction to this Module on pages 9 to 13. Then we explore each aspect course planning and design in greater detail.

Can you see how a trainer can mix a variety of content sequencing techniques? The purpose here is to create a learning experience through which outcomes can be achieved.

Generally it is sensible to go from Known to Unknown and where possible to go step by step.

On the issue of whether to go from general to specific or specific to general it is known that different learners respond variably to these sequences. A good plan is to merge them by:

- An introductory general overview
- Attention to detail that then
- Builds up into a richer general picture or generalisation or theory or law

The following can serve as handy guidelines to use when you are sequencing the content of one of your training programmes in future:

- Place tasks and information that are easy to learn early in the sequence (this is much the same as known-to-unknown sequencing discussed above).
Introduce broad concepts, principles and technical terms that have an application throughout the course early in the sequence.

Place the application of skills, concepts and principles close to the point where they are introduced (it is this piece of advice that is followed when it comes to activities in this topic; what is the use of you doing all the activities only once you have worked through all the material, that is, right at the end of this topic).

Place previously learnt knowledge and skills just before new knowledge and skills (this is the reason for ending one learning experience with a summary or concluding remarks before moving on to a new learning experience).

Provide for practice and review of skills and knowledge (this is the aim of all the activities you have to do throughout this topic, namely to build your skills and knowledge base).

Place complex knowledge and skills later in the sequence (this corresponds to the concrete-to-abstract sequencing).

Note that simply because headings are numbered does not turn non sequential material into a genuine step by step sequence. Use numbering with caution.

Determining content with a training programme is not just about what is to be learnt, but also how it will be learnt. We therefore come to the next two learning experiences that still deal with designing a training programme, namely that of selection of instructional strategies and selection of instructional media.
Activity 3.6: Sequencing content

We are all exposed to information on a daily basis, whether it is through the radio, the television or through people talking to us (either formally or informally).

Listen to any presentation or conversation by someone else and see if you can recognise the way in which the information is sequenced. Does the person start with the easy material and move on to more complicated content? Does he or she supply you with a step-by-step sequence of tasks? Does he or she revise information that you ought to have before going on to something that is not so familiar?

Example

I once listened carefully to the TV news presenter to determine how she sequenced the information. She started by stating a new event of the day: “An oil tanker has run ashore near Cape Town”. Well, I thought, ships are often wrecked along the South African shoreline. What is so special about this one? Then the presenter went on to give more detailed information and explained the impact that the oil from the tanker could have on the local environment. By supplying more information after the initial announcement about the wrecked tanker, I could see that it was something newsworthy.

Do you see how the sequencing of information is important for understanding?
Planning the teaching/ instruction/ facilitation and assessment on the course

By the time you get to this stage all the preliminary steps have been undertaken:

◆ a training need is to be met
◆ a learner profile has been established
◆ the general course aim and the specific learning objectives/outcomes decided on
◆ the course content and its general sequence chosen

Now decisions have to be made how the actual course is to be taught by the trainer or team of trainers.

This will include the following:

◆ Adopting a broad training approach or strategy (congruent with the beliefs and training ideology of the organisation, trainer and participants and which must fit in with the outcomes)

◆ Choosing training activities that fit in with the course content and sequence and timing

◆ Choosing the training methods that will enable these activities to work given all the above

◆ Supporting the methods chosen with materials, media and training aids

◆ Assessment of the learning that is achieved through the teaching (which must relate to the planned for outcomes as there is little point in assessing what does not relate to the them).

These will be looked at briefly in the following pages but will be explored in more detail in the next three modules:

Module 4: Facilitating and assessing learning
Module 5: Methods, media and technology in facilitating learning
Module 6: Management and Evaluation of ETD practices
Adopting a training approach or strategy

The broad strategy that you adopt must obviously be one that organisation, trainers and participants will be comfortable with. This will partly depend on the reigning beliefs held by trainers at the time and on the background of everybody involved. Thus academics from a university will tend to run a course very differently from trainers in industry. Participants will also have their own ideas on what they think is "proper" training. Consideration will have to be given to how participatory the training will be. Theories of learning will also influence the approach chosen and the nature of the outcomes will determine whether the course has very fixed or open outcomes. Thus, for example the process of a technical skills training course will be very different from one on adapting to change.

Choosing training activities that fit in with the course content, sequence and timing

Because real learning is active, much of the planning of a course must be about what the learners (rather than the trainer) will be doing. How will trainees be engaged and involved in the course? Even when trainers are teaching or presenting, what will the learners be doing? How will they practice and reinforce their learning of knowledge and skills (see again Module 1 pages 54-61).

Much of this choice of activities will be influenced by the choice of training methods to be used by the trainers.

Choosing appropriate training methods

Because of the enormous variety of training methods trainers are often perplexed as to what methods to use and revert to the standard lecture/presentation, discussion and worksheets. There is more about methods in Module 4.

Choosing assessment activities to show that learning has taken place

Because of the too easy identification of assessment with formal written examinations and tests, there is often a failure to recognise that assessment is always an integral and continuous part of any training event. Even if there is no formal assessment, trainers are constantly making intuitive judgements about whether the participants are learning. In an outcomes-based training approach assessment is consciously foregrounded. Outcomes have to be achieved and assessment is the clear demonstration that the desired outcomes have in fact been achieved. Ideally, assessment activities should be decided on early in the course design process. More will be said about assessment in Module 4.
Activity 3.7: Developing the learning programme strategy

Considering one of the planned outcomes/objectives of one of your courses, answer the following in relation to the manner in which outcomes inform content.

- What content will you include in the training programme?
- In what order would you sequence the content?
- How many units, parts or modules?
- What will the time duration of the programme be? (Think in terms of notional hours; contact or classroom and workplace learning.)
- What training methods will you use?
- What assessment strategy will you use?
Activity 3.8: Develop a lesson plan/process guide

Think of the training programme you are busy designing. Develop an outline of a lesson plan/process guide based on your work so far and the results of the previous activity.
Choosing or designing instructional materials

Almost invariably training in the public service uses various forms of materials: as handouts, exercises and workbooks for direct instructional purposes, to provide background or additional information, or as reference material in manuals and guides.

Learning material must be relevant to the subject area and suitable for the target group. An adequately analysed learner profile will assist in the choice or design of the material as will the way in which the course or programme has been conceptualised and designed. and which mode of delivery is being used. Face to face instruction, distance education, working in groups or as individuals, etc. all required different types of materials. What materials lend themselves to the subject content and the sequencing of that content? How will the materials relate to activities and exercises that the participants have to engage in?

As with the most aspects of a programme or course, it is advisable to pilot the learning materials with a representative sample of learners and practitioners and to use the feedback received, to revise and adapt the materials and how they are used.  

Some examples of training materials are:

- Training programme or course outline
- Timetables
- Self-instructional material
- Course units or modules
- Handouts for specific sessions (short course notes and exercises)
- Workbooks
- Assignment lists
- Readings
- Bibliographies or resource lists
- Lesson plans
- Evaluation forms
- Checklists for course planning
- Report formats and procedures
- Course manuals for learners and/or trainers
- Trainer guides.

Training programme or course outline

An outline of the course or programme needs to be communicated to the learners. Learning sessions must have a schedule, whether a three-hour workshop or a three-week course. The schedule provides the learner with an outline of the course and may help to provide a sense of its purpose, logical sequence, and content. The amount of detail in the programme depends on the preferences of the individual trainer. Daily schedules and topics may be stated, then activities and methods and the duration of each activity.
Timetables
In the restricted sense timetables are essential for telling participants when the starting and ending times are and when there are breaks.

Self-instructional material
Self-instructional material that learners will study on their own should be developed if the learners are required to gain some knowledge beforehand at their own pace, without trainer assistance, in order to bring all learners to the same entry level. This self-study must be genuinely self-instructional in that it must contain within itself clear instructions on how it is to be used and studied. The learners must be clearly informed what the objectives of the material are and be given guidelines and questions to ensure their most effective reading of the text. Learners should also be informed on how to gain assistance where there is material which they do not understand.

Course units or modules
This is study material used within a course. Well designed material with have clearly stated objectives, an easily comprehended structure and layout, a good introductory section, content with examples and exercises, and a conclusion that reviews the information in the unit. Modular material should have the same structure and size.

Handouts
These are ad hoc sets of notes, exercise instructions, written case studies or guidelines for role interpretations, readings, etc. The design of handouts should be done as carefully as when producing course modules.

Workbooks
Workbooks should contain appropriate text to be read and respond to, checklists, self-evaluation questionnaires and similar material. A workbook should be an organised and timesaving aid.

Assignment lists
These are often distributed separately from course units as they need to be changed with each group of students. They need to be carefully designed to avoid any ambiguity and all students questions anticipated about how the assignments are to be written and delivered.

Readings
These are to provide background, preparatory or follow up information. They need to be carefully chosen for relevance. You may need to get copyright clearance for their use.

Bibliographies or resource lists
These provide lists of readings or resources for learners. All references must be rigorously done in some standard format. In some case you may need to indicate where resources are held in local departmental libraries or resource centres.
Lesson plans
These can have two uses, as guides for trainers in running courses or workshop sessions or as models for learners so that they can see how a lesson or workshop is planned and documented. It enables them to reflect on how a training lesson they have just experienced was planned to work.

Evaluation forms
In designing evaluation forms, assessment of reaction, learning, behaviour and results must be taken into account. The design should ensure unbiased information; the layout should be neat and easy to understand. A combination of "closed" and "open" questions should be used. Answers to Closed questions may be indicated by a cross on a sliding scale (quantitative information). Open questions provide an opportunity for giving reasons, commentary or suggestions (qualitative information).

Checklists for course planning
These can be used in a variety of ways though it is important that learners actually practice using them rather than simply have them as a possible resource.

Report formats and procedures
These should be clearly written and practice given in their use. They could include reports on course evaluation, learning outcomes achievement, trainer's comments and recommendations.

Course manuals for learners and/or trainers
Manuals can serve a number of functions:
- as a systematic course of study for the participant to engage in during an actual workshop
- as a systematic course of study that the participant will do in his or her own time after an introductory workshop
- as a resource for the participant (of either content material or course or workshop designs) that they can use in their training work
- as a manual that will be used by other trainers (for example when replicating the course with other participants).

The contents in a trainer guide will differ depending on the assumed competence and experience of the trainers who will use the guide and on the degree to which each iteration of the course is meant to be virtually identical or varied/adapted. Thus Trainer Manuals or Guides can vary from a set of instructions on how to run a thoroughly prepackaged course complete with all the materials, through a more open ended set of suggestions, through to a compendium of information and resources related to a course.

Usually a Trainer Guide provides at the very least an overview of the following:
- The learning programme (programme name, programme description, programme purpose and learning assumptions (access requirements))
The curriculum design (outcomes, delivery strategy/modes, methods, media, learning aids and time frame)

The learning programme design (learning strategy, workplace experience, time allocation per component, prescribed content/reading, instructional methods, media, aids and equipment)

The assessment strategy for the learning programme

Learner support materials (handouts, worksheets, media, aids, equipment to be used, etc.)

Learner support information (learner role and responsibilities, and learner support)

The programme evaluation strategy (programme or course evaluation, facilitator evaluation, and logistics evaluation)

Additional logistical, policy and provider information

Generally a Trainer Manual/Guide needs to be bundled with a full set of all the learner materials.

Often Trainer Guides develop over time as individual trainers record the implementation of the course or programme. Even if there is no plan to produce a Trainer Guide as such, there is a need to ensure that a full set of records are kept of the course.
Planning the administration of the training

It is important that the training programme or course be implemented effectively and efficiently. This too has to be planned for.

Generally, for any programme or course, there are some basic administrative necessities. These are:

- Getting authorization
- Gaining a budget
- Booking a venue
- Deciding who is the manager/controller of the course
- Deciding on staff roles in the implementation of the course (both training and administration)
- Administering venue, equipment, copying of course materials, and catering
- Providing transport and accommodation of trainees
- Recruiting and registering learners
- Recording trainee data
- Recording trainee achievement of outcomes and certifying this
- Reporting on implementation, assessment and evaluations
- Storing documentation on the course and the trainees

**Phases of administrative support for a course**

Administrative support is required and arrangements will have to be made for at predictable phases:

**Pre-course administration**

Bookings will have to be made for the venue, accommodation, food and refreshments, equipment, and the trainer who will facilitate the course. You will have to prepare course lists, send out registration forms and send out pre-work and joining instructions. Lastly you will have to send details of the learners to the trainer and inform him or her of all the arrangements.
During course administration

This needs to be done in a way that leaves the trainer free to train and not be distracted by things such as catering.

Post-course administration

After the course, the trainer has to confirm the attendance of the learners, training records have to be amended and course evaluation forms have to be analysed. In addition, finances, costs and expenses in respect of the course have to be documented and finalised.

The importance of records

It is important that learners should keep the right type of records since these can assist in determining whether employee performance should be improved or not. Trainers should direct their efforts at improving and developing employee performance, and this requires the planning of record systems in such a way that they serve as useful reporting sources.

Records are kept not just for internal use, but there are also often official requirements if the organisation is involved in a training board or equivalent.

Purpose of records

This will differ from organisation to organisation. In general terms, training records are kept to:

♦ Make strategic training decisions as part of the planning process.
♦ Keep track of the status of skills in an organisation
♦ Be able to reply to inquiries from top management and outside institutions
♦ Guide employees to reach their full potential in the workplace by devising development plans that suit individual needs.

Types of records

The main types of records that should be kept by a training department are the following:

♦ Human resources planning data
♦ Records of courses attended and personal training records of employees
♦ Performance and development appraisal records
♦ In-service training records
♦ Course evaluation records
Training costs and budgets

An important aspect of the training practitioner's planning task is to present training as cost-effectively as possible.

Training expenses must be justifiable in terms of overall business plans of the organisation. The following aspects must receive attention when a training budget is prepared:

- Existing training and future needs: Decide whether existing training interventions will be retained
- Facilities: Determine whether facilities for presenting training are or will be available
- Suitable personnel: Make provision for the recruitment or re-training of training personnel
- Salaries: Make provision for the salaries of the training personnel
- Personnel development: Make provision for expenses relating to personnel development.
- Sundry costs: Make provision for:
  - Traveling costs
  - Bursaries
  - Training material
  - Fees for consultants and guest speakers
  - Refreshments

Administering the physical environment

The venue and its facilities is one of the most important factors to consider when planning training. Neglecting these could result in the failure of your training. There is little as demoralising to trainees as a venue in which they can not see or hear, where the air-conditioning cannot be adjusted, or the glare from windows without curtains renders the carefully prepared projected data impossible to read.

Responsibilities have to be allocated in advance as to who will check out the venue and equipment, who will get it working and who will be on call if something fails to work.

It usually pays for a trainer to have a trainer's toolkit precisely because of the predictable emergencies that afflict all trainers. Such a tool kit would include plugs, adaptors, extension cords, and materials that can be used when the electricity fails (such as newsprint and crayons), spare overhead transparencies). For important workshops some kind of backup power source may be necessary if all the speakers are dependent on illustrating their presentations using dataprojectors.
Activity 3.9: Venue administration

Complete the following table by giving reasons why the mentioned factors is necessary to consider when you want to a suitable learning environment.

<table>
<thead>
<tr>
<th>Factors to consider</th>
<th>Why is it necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lecture room</td>
<td></td>
</tr>
<tr>
<td>Break away rooms</td>
<td></td>
</tr>
<tr>
<td>Lighting</td>
<td></td>
</tr>
<tr>
<td>Darkening</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
</tr>
<tr>
<td>Acoustics</td>
<td></td>
</tr>
<tr>
<td>Noise</td>
<td></td>
</tr>
<tr>
<td>Toilets</td>
<td></td>
</tr>
<tr>
<td>Seating</td>
<td></td>
</tr>
<tr>
<td>Tables</td>
<td></td>
</tr>
<tr>
<td>Layout of the room</td>
<td></td>
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<tr>
<td>Equipment</td>
<td></td>
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<tr>
<td>Visual aid</td>
<td></td>
</tr>
<tr>
<td>Wall plugs and extension cords</td>
<td></td>
</tr>
<tr>
<td>Extension cords</td>
<td></td>
</tr>
<tr>
<td>Assistance</td>
<td></td>
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<tr>
<td>Equipment available</td>
<td></td>
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</tbody>
</table>
Planning the evaluation and reporting

The obvious question at the end of any training event is: “Did it work?”

This question is also of obvious interest to your organisation, your superiors and whoever paid for the training to happen.

There are a number of questions that you have to plan to answer:

- How are you going to report on the progress of a group of learners?
- What report or reports on the trainees are expected and who are they for?
- How will the programme or course be evaluated?
- Who will run the evaluation?
- How will you finally report on the programme or course? What essential details must be included in the report. (e.g. purpose, type of event, trainer(s), participants, date, venue, observed outcomes, strengths and weaknesses)?
- How and when will you reflect critically on your own performance as a trainer in the design and implementation?
- Do I have to leave a full record for the trainer who comes after me.

Evaluation and reporting are important indications that our work is important and its taken seriously. It too needs to be planned for and more on this subject is provided in Module 6.
Activity 3.10: Review of Module 3

Review what you have learned against the outcomes of the module.

What were the significant learnings for you?

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What will you apply?

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How will the be the first practical steps you take in applying them?

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Activity 3.11:  Group discussion on applying your learnings

In groups discuss how you will apply what you have learned in this module in your own training activities and workplace and what further actions you can take to increase your knowledge, understanding and skills regarding the context of education, training and development practices.

<table>
<thead>
<tr>
<th>Actions I can take</th>
<th>Who can assist me?</th>
<th>When should I review my progress?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
Checklist for Competencies

_module 3: Planning and design of outcomes-based education_

Name: _________________________________________________________

Assess your own skills by indicating with a ✓ how you rate yourself on each aspect mentioned.

<table>
<thead>
<tr>
<th>I can ...</th>
<th>Poor</th>
<th>Fair</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify key features of a programme or course plan</td>
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<tr>
<td>Identifying the profile and needs of the specific learners</td>
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<tr>
<td>Explain the importance of learning outcomes</td>
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<tr>
<td>Describe and explain standards</td>
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<tr>
<td>Formulate learning outcomes</td>
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<tr>
<td>Align learning outcomes with national standards</td>
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<td></td>
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<tr>
<td>Create a programme or course plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determining a programme or course strategy</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Select and sequencing content</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Activity 3.12: Self-assessment on this Module

1. Discuss the planning of training in your context.

   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

2. Discuss the key elements of a course plan.

   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

3. Discuss the importance of outcomes in planning a course.

   ______________________________________________________
4. Discuss the planning of assessment.

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5. Design a short course outline in your field.

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Evaluation of Module 3

What did you like about the module?
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What did you not like?
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What would you like to change?
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Any other comments
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_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
References


