

GUIDELINES FOR DEVELOPING LEARNING MATERIALS

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CONTENTS

CONT	FACT DETAILS	1
I.	FOREWORD	3
II.	LIST OF ACRONYMS	4
III.	ACKNOWLEDGEMENTS	5
IV.	GLOSSARY OF TERMS	6
1.0	INTRODUCTION	13
1.1 1.2 1.3	Types of Learning Material Background of these Guidelines Purpose	14
2.0	QUALITY PRINCIPLES	15
2.1 2.2 2.3 2.4 2.5 2.6 2.7	FOUNDATION SCOPE STRUCTURE AND DESIGN FLEXIBLE DELIVERY ACCESS AND EQUITY CONTENT FEEDBACK AND EVALUATION	15 16 16 17 17
3.0	MATERIAL DEVELOPMENT PROCESS	19
3.1 3.2 3.3 3.4 3.5 3.6 3.7	IDENTIFICATION OF NEEDS INPUT SOURCES RESOURCE MOBILISATION PILOTING REVISION AND AMENDMENT (AFTER PILOTING) IMPLEMENTATION EVALUATION	20 20 21 21 21
4.0	SAMPLES	23
4.1 4.2 4.3 4.4	SAMPLE 1: A VARIETY OF STRATEGIES SAMPLE 2: JIGSAW IN 10 EASY STEPS SAMPLE 3: DRAMA SAMPLE 4: MATCHING QUESTIONS	28 29
5.0	REFERENCES	33
6.0	APPENDICES	34
	ARNING MATERIAL DEVELOPMENT CHECKLIST CUMENT EVALUATION	

I. FOREWORD

I want to express my gratitude to Mrs Rose G Masisi and Mr Victor Otsheleng who initiated and coordinated the development of these Guidelines.

The Guidelines contain a number of important challenges to learning material developers, the aim of which is to support different types of learning modes. The key intentions of BOTA in developing these guidelines is to ensure that learning materials developed include and support different types of learners including disadvantaged individuals, those who are at risk of becoming disadvantaged and workplace learners. To achieve this, seven quality principles have been identified to guide trainers and developers of learning materials.

It is also envisaged that these Guidelines will play a more central role in supporting vocational training and learners as individuals, guided by the aligned or outcomes expressed curriculum. In this regard, the Guidelines strengthen the link between industry, institutions and learners. They provide advice on learning strategies, delivery procedures (what to do), resources and cautions and the need to link learning materials to outcomes expressed or aligned curricula.

The Guidelines also act as a source of reference designed to help trainers and material developers.

It is my sincere belief that this booklet will provide useful guidance to end-users.

Peter R Fleming

Director, Structured Work Based Learning

II. LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANTA	Australian National Training Authority
BNVQF	Botswana National Vocational Qualifications Framework
ΒΟΤΑ	Botswana Training Authority
CD-ROM	Compact Disc for Read Only Memory
HIV	Human Immunodeficiency Virus
ІСТ	Information, Communication and Technology
KSA(s)	Knowledge, Skills and Attributes/Attitudes
NZQA	New Zealand Qualifications Authority
OHP	Overhead Projector
ОНТ	Overhead Transparency
STIs	Sexually Transmitted Infections
VT	Vocational Training

III. ACKNOWLEDGEMENTS

This document was prepared under the auspices of the Botswana Training Authority (BOTA) with the guidance of a consultant for Cue F Consulting Ltd, New Zealand - Mr Brent Richardson. A three-day intensive workshop was held in October 2003 to develop guidelines for learning materials development. In this process, level 1 draft unit standard for HIV and AIDS was used. The data collected through this workshop have been used to develop these Guidelines.

BOTA acknowledges the following workshop participants and the facilitator for their invaluable input towards development of these Guidelines:

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17.	Otsheleng V	-	Botswana Training Authority
18.	Richardson B	-	Cue F Consulting Ltd, New Zealand (workshop Facilitator)

IV. GLOSSARY OF TERMS

Interpretations provided are in the context of these Guidelines.

- Access and equity refers to strategies used to open vocational training to all individuals in the community, particularly focusing on those groups that have been traditionally under represented (ANTA (2003)).
- Accreditation refers to formal recognition of a training institution/assessment centre, following a formal evaluation of an application against a set of criteria, that the defined programmes of learning and training and/or awards following formal assessment offered by a registered organisation have been found to meet required standards and are of 'good standing' that they are supported by key stakeholders, well staffed, resourced and administered in line with stakeholder and BOTA expectations and requirements.
- Accreditation of learning refers to formal recognition through robust assessment that learning has occurred, either in formal and/or informal contexts, and that it was effective. Where accredited learning is used to grant entry into a programme or course it is often referred to as recognition of prior learning (RPL). Where it leads to the award of credits towards an award it is often referred to as recognition of current competence (RCC). In the latter case, credits would be recorded on the national database.
- Aligned curricula refers to the curricula developed following the curriculum alignment processes as stated in the BOTA *Guidelines for Preparing Curricula Linked to Unit Standards*.
- Appointed committees refer to formal bodies recognised as having rights, authority or acceptable reputation to represent the interests and views of key stakeholders in a specific occupational area. Could include professional associations, regulatory boards, industry training organisations etc.
- Assessment refers to identified methods that will be used to indicate whether or not a
 person has attained an outcome of learning. It is a process for collecting and interpreting
 evidence of ability or competence. It involves:
 - collecting evidence with regard to knowledge and skills of a person;
 - judging the usefulness of the evidence collected; and

 making decisions about what the evidence says about the knowledge and skills of a person.

The assessor obtains from the unit standard a benchmark against which to make their decisions. Assessment may take place as and when the learner is ready. Where the interpretation of evidence is against transparent performance criteria, assessment can be referred to as **standards-based**.

- Attitude refers to performance of skills or use of knowledge within the value system of the company and society (Strong *et al*, (2001)).
- Attribute refers to the quality belonging to or forming part of the nature of a person (Strong *et al* (2001)).
- Audience refers to the people reached by a book, presentation, film radio or any form of media.
- Botswana National Vocational Qualifications Framework (BNVQF) refers to collectively, all nationally registered qualifications and their associated unit standards, the defined and logical relationships between them, and the integrated quality assurance processes that provide the basis for the accreditation of learning and the determination of equivalences of vocational qualifications.
- Briefing cards refer to cards written to give information to role players on their respective roles.
- **Caution** refers to the careful forethought to avoid danger or harm or warning , especially to take heed.
- **Credit** refers to a value assigned to a unit standard or qualification that represents the notional learning time required to meet the performance requirements and standards of the unit standard or qualification. One credit equates to 10 hours of notional learning time.
- Course refers to a discrete component of learning or training pathway developed and/or used by a training provider that equips an individual with the knowledge, understanding

attitudes and habits relevant to the requirements for the award of a unit standard or qualification.

• **Curriculum** refers to a course of study offered in a school, training institution or university. Curriculum documents tend to be quite broad and general in what they state.

A training design or plan that defines: aims, goals and objectives of an educational activity; the ways, means and activities used to achieve desired outcomes; and procedures and instruments needed to evaluate actions. (ILO International Centre for Advanced Technical and Vocational Training (1987)).

- Curriculum document refers to a document that reflects essential guiding information on a particular curriculum or learning programme. It usually covers issues such as the main purpose of the curriculum, implementation, assessment and monitoring strategies to be used, and the necessary resources.
- **Cutaway** refers to a drawing or a model of a machine, engine or human body in which part of the casing is omitted to reveal the operations and functions.
- **De-couple** refers to the process of releasing from a role, or to disengage role player from the role, sometimes known as debriefing.
- Empathy refers to the power of understanding and imaginatively entering into another person's feelings (Advisory Council of Experts – Your Dictionary (accessed 2004) – website).
- **Enrolment** refers to the registration of a person with a training institution for the purpose of undertaking a course or module. It also refers to the total number of registered learners in a training program (ANTA (accessed 2003) website).
- Entry requirements refer to the qualifications, knowledge, skills or experience required for entry to a training programme.
- **Evaluation** refers to consideration of an initial application for formal recognition by BOTA from an organisation or individual.

- **Experiential learning** refers to learning through experience rather than through books or formal instructions (Gordon *et al* (2003)).
- Flexible delivery refers to an approach to training that enables a variety of ways in which clients can learn and demonstrate competence. Clients can choose, what, where and how they learn, and are provided training that suits their individual learning needs and styles (ANTA (2003) – website).
- Heterogeneous refers to where learners of different educational backgrounds are grouped together to form one group.
- **Homogeneous** refers to a situation where learners of equivalent educational backgrounds are brought together to form one group.
- Internationally comparable refers to a situation where a programme developed is similar or equivalent to other programmes developed or offered outside Botswana.
- Learning event refers to the identified knowledge, skills and attributes to be acquired during the learning process, and which are an integral part of a learning module.
- Learning materials refer to all printed matter, audio-visuals and manipulative aids used for instructional/learning purposes (ILO International Centre for Advanced Technical and Vocational Training (1987)). They are resources meant to guide learners during the process of learning.
- Learner-centred approach refers to a training/learning method that is shaped by the needs of the learner, and recognises and responds to learners as individuals. It is achieved when:
 - focus is on the learner's development, interests and needs;
 - learning builds on the learner's life experiences;
 - there is ongoing learning, in which the learner is an active participant; and
 - there are many opportunities for talking, sharing and collaborating (Edwards Home page (Accessed 2003) website).

- Learning session refers to a short (usually less than a day) learning event that can be part of a course but with its own internal coherence and sufficiently discrete to be able to stand alone.
- Mannequin refers to a jointed model of the human body used by artists, especially for demonstration purposes – eg in demonstrating the arrangement of drapery.
- **Module** refers to a small, self-contained component being integral to a greater whole. It could be an important part of a course.
- Module organisation refers to sequencing of structured activities, opportunities, or structure for self-directed learning.
- Notional learning time refers to all activities relevant to the attainment of an outcome of learning and is not restricted to face-to-face delivery/contact time. In determining credit values, learning time is 'notional' as it is not linked to the time taken by an individual learner but to the time taken by a learner typical of those who seek the credits to meet the performance requirements to the required standards.
- Outcomes expressed programme refers to a learning programme that clearly defines the knowledge the learner is expected to demonstrate upon its completion. It focuses on measurable outcomes of learning.
- Outcomes of learning refer to the statements of the result of formal or informal learning

 generally having knowledge and understanding of and/or ability to something in certain contexts to certain standards. Also referred to as learning outcomes. They differ from learning objectives in that objectives are statements of intent rather than actual results.
- Professional materials refer to resources which have, or demonstrate a high degree of knowledge or skill meant to inform on advancement of technology or new findings for consumption by people already in the discipline.
- Programme refers to a structured pathway of learning or training designed to equip a person with the knowledge, understanding, attitudes and habits relevant to requirements for the award of a unit standard or qualification.

- Props refer to implements or resources used to support a learning strategy, such roleplay method.
- Qualification refers to formal recognition through certification, following formal assessment processes, of the attainment of a meaningful and coherent cluster of outcomes or results of learning or training. A qualification may represent the profile of outcomes of learning required for particular work roles or a significant milestone in a learning or training pathway.

Foundation Certificate – a qualification approved by BOTA recognising the results of broad based initial training and reflecting competence to perform, under supervision, a limited range of work activities.

Intermediate Certificate – a qualification approved and registered by BOTA recognising competence to perform, with minimum guidance and supervision, routine jobs and some non-routine jobs.

Certificate – a qualification approved and registered by BOTA recognising competence to perform tasks associated with skilled jobs of non-routine and complex nature and indications of potential for performing supervisory functions.

- Resources refers to the human resources, financial resources or materials/equipment that will be required for successful training/learning. It is a pre-requisite that a training institution meets the quality requirements of BOTA, pertaining to registration and accreditation of institutions, trainers and assessors. For their training services and systems for managing quality to be recognised under the BNVQF institutions will need to apply to BOTA for registration and accreditation.
- Review refers to the summative evaluation of a programme, usually undertaken to inform and advise the programme developers on matters pertaining to its workability. Review of the programme is a major exercise that usually occurs every four to five years, following the review and/or introduction of relevant unit standards. Outcomes of review usually warrant major changes in the curriculum
- Revision refers to the formative evaluation of a programme, usually takes place as and when necessary (eg at the end of a cycle/year) to address minor but important curriculum changes.

- Scenario plan refers to the outline or model of an expected or supposed sequence of events used to guide the role-players.
- See through refers to a partly or wholly transparent or translucent component used as a training/learning model
- **Target group** refers to the/any category of people/participants who the training programme or materials are meant for.
- Training/learning strategies refer to methods used to impart knowledge, skills and attributes, sometimes referred to as methodology.
- Training Institution refers to any public or private centre or organisation operating in Botswana that has, as its primary purpose, the provision of formal training and/or assessment services linked to the Botswana National Vocational Qualifications Framework.
- **Training materials** see Learning materials.
- Training plans refer to plans for imparting of knowledge, skill and attributes in respect of a training programme.
- Unit of Learning refers to a statement of the training and learning approaches, context and content, resources and the range and number of assessments. An institution develops these delivery details for training purposes.
- Unit standard refers to a registered statement of the outcomes of learning assessed, the type and quality of evidence that represents performance worthy of the award of credits, and the contexts in which that evidence should be demonstrated.
- Validity refers to the programme/curriculum having value or a strong firm base, that curriculum development can be used to defend. It is appropriate in kind and, within that kind, sufficiently complete and addresses the identified needs.
- Web-based training refers to the training that is available on a web site.

1.0 INTRODUCTION

These Guidelines are meant to take curriculum development a step further into a stage of curriculum delivery process by providing guidance on the design and production of effective learning materials.

Production of good quality learning materials largely hinges on the quality principles stated in this document. Although these principles are broad, an effort should be made to cover most, if not all of them. They also act as a self-assessment guide for production of high quality learning materials. Botswana Training Authority (BOTA), through its scheduled interventions with vocational training institutions, will provide support and guidance to vocational training institutions on issues of development of curriculum and learning materials. Such institutions should however be **registered and accredited** by BOTA.

These Guidelines should be used with the *Guidelines for Preparing Curricula Linked to Unit Standards*, obtainable from BOTA.

1.1 Types of Learning Material

Learning materials referred to **in this document** are resources that help learners, trainers, assessors, employers and other providers implement training/learning and assessment based on the unit standards registered on the Botswana National Vocational Qualifications Framework (BNVQF). BOTA will provide guidance to ensure that quality requirements are met when developing such resources. These materials may be developed to meet the learning strategies deemed by a training institution or industry to be appropriate. The types of learning resources are broad and include:

- Assessor Resources;
- Learner Resources;
- Trainer Resources;
- Professional Materials; and
- Promotional Materials.

Learning materials can be presented in different forms to meet the needs of different target groups, and can also be designed to suit different learning styles and delivery modes. Their presentation could, for example, be in the form of printed materials, CD-ROMs, web-base.

1.2 Background of these Guidelines

The quality principles which form the basis for these Guidelines were identified in stakeholder consultation workshops held from October 2003 to March 2005. They aim at assisting trainers/developers cater for the varying needs of learners, when developing learning materials for curriculum implementation.

1.3 Purpose

The purpose of these Guidelines is to ensure consistency in the development of learning materials once the curriculum is aligned with unit standards or is outcomes expressed.

2.0 QUALITY PRINCIPLES

The seven Quality Principles identified were seen as a way that will enable production of learning materials that address the varying needs of users. The Quality Principles were founded on the premise of promoting access to learning opportunities on equitable basis, eg guiding BOTA and material developers on production of user friendly and flexible learning materials.

The Quality Principles in question are Foundation; Scope; Structure and Design; Flexible Delivery; Access and Equity; Content; and Evaluation and Feedback – which are discussed in the sections that follow.

2.1 Foundation

Learning materials must be guided and supported by the aligned or outcomes expressed curricula and they must:

- be relevant to industry needs so that they are capable of preparing the learner for the current and future trends in the world of work;
- be challenging but still appropriate for the level of the target group;
- o adapt rather than duplicate the existing materials eg reference materials, manuals;
- o be internationally comparable;
- not violate copyright laws; and
- indicate notional learning time.

2.2 <u>Scope</u>

Scope refers to the breadth and depth of the learning material. In order to ensure that the scope is fit for purpose – ie suitable for the target group and addressing the expected outcomes of learning – developers need to:

- identify the relevant outcomes of learning or competencies, and support their acquisition;
- relate to the appropriate target group(s) ie flexible enough to accommodate the varying abilities and backgrounds – eg academic, training, work experience;

- o provide clear examples, explanations and illustrations;
- indicate resources needed;
- o provide an accurate industry context to suit current and future work environment;
- o emphasise purpose of learning in terms of employment opportunities; and
- provide a list of recommended further reading.

2.3 <u>Structure and Design</u>

Learning materials must not only promote effective learning and assessment strategies but must also have a clear structure and be sequenced such that the target group can easily explore them. They must:

- be easy for the learner to navigate through;
- present a visually attractive design;
- be usable by the hearing, visually and physically impaired;
- o provide activities and learning strategies designed to motivate learners; and
- use words/language appropriate for the level of the target group.

2.4 Flexible Delivery

Learning materials must consider that learners (as well as trainers and assessors, as appropriate) have varying needs, preferences and entry levels, therefore must:

- provide a variety of learning methods;
- provide for use in a variety of training/learning contexts eg on job, off job and simulations;
- provide guidance on entry requirements (especially for learning packages/self access material(s));
- be adaptable for use under different but similar conditions eg making coffee is different from making tea but the process is more or less the same;
- provide adequate user guides ie other relevant reference materials like manuals, must be indicated in the material for reference purposes;
- provide guidance, as necessary, on safety, health and environment requirements pertaining to the learning event;
- be challenging to cater for target population (eg should challenge both the homogeneous and heterogeneous groups);

- be linked to industry minimum performance requirements/standards in order to adequately prepare the learner for the world of work; and
- highlight issues pertaining to modes of delivery eg distance learning.

2.5 Access and Equity

In order for learning materials to be inclusive, they must:

- accommodate learners from different geographical locations for instance, using relevant/common examples/contexts – for workplace learning taking place in remote areas;
- o accommodate cultural diversity;
- challenge stereotypes of gender, ethnicity, creed and ability status, which can be corrected/reversed by use of non discriminatory words, pictures, illustrations and examples;
- be affordable in terms of purchase price/procurement;
- be moderately colourful but attractive not boring but not too colourful Avoiding colours like orange and red;
- be produced in a way that is cost effective ie affordable by producers;
- take Information Technology needs on board;
- o provide guidance on training/learning and employment opportunities.

2.6 <u>Content</u>

Content refers to what goes into the learning material. It provides an elaboration of the expressed KSAs in the curriculum. A well-balanced content must:

- be interactive by keeping the target group engaged ie tasks must adopt a practical approach, – eg role plays, projects, drama and surveys of living examples;
- be presented in a language appropriate for the level of the user eg the lower the learner's educational background the simpler the language;
- o be simple but yet challenging to the learner in order to sustain their interest;
- o simulate reality in terms of work requirements and problem solving ie be realistic;
- o assist the trainer's effort in delivering/implementing the curriculum;
- be sufficient in parameters not too much and not too shallow guided by the curriculum;

- Internationally and locally comparable and up to date;
- provide notional learning time frame; and
- integrate and correlate theory with practice.

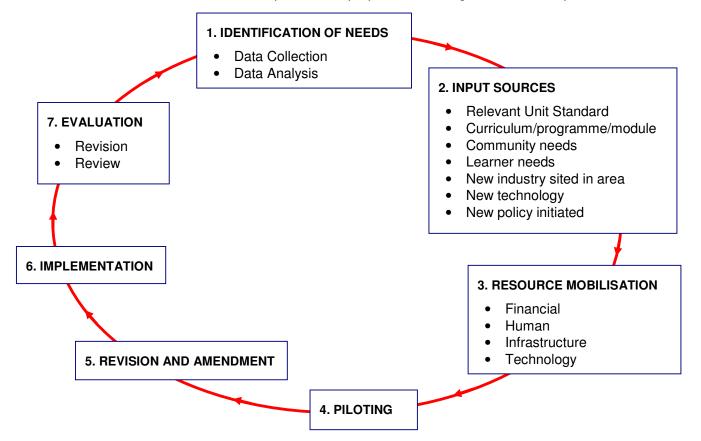
2.7 <u>Feedback and Evaluation</u>

Learning materials must promote self assessment for the learner and provide feedback to both the learner and the developer. They must:

- show the date on which the material was produced;
- show the date of next review of the material;
- o provide a list of assessment questions/tasks/activities for the user;
- o include a questionnaire to evaluate the material; and
- state the contact details of the producer.

3.0 MATERIAL DEVELOPMENT PROCESS

The Curriculum development model sampled in the Guidelines for Preparing Curricula Linked to Unit Standards was adopted for the purpose of learning material development.



3.1 Identification of Needs

This is the planning stage where the developer can prioritise and strategise on issues to consider. The developer is therefore required to:

- establish the need for the learning material;
- evaluate the existing materials;
 - compare the existing materials with identified outcomes of learning reflected in the curriculum/programme/module;
 - o identify gaps between the two;
- o understand quality principles for developing learning materials;
- o ensure that a system for managing material development quality is in place;
- o outline activities or project plan for developing learning materials (Gunnt Chart);
- o identify constraints; and
- o consider the needs of the target group.

3.2 Input Sources

Inputs are those aspects that the developer needs to bring together when developing learning materials. The developer needs to:

- identify the learning events or outcomes of learning stated in the curriculum/programme/module;
- o consider the background and needs of the potential learner;
- o consider different types of learning modes;
- link materials being developed to the learning process;
- identify the learning setting;
- o identify the learning media;
- o state the learning notional time in hours;
- state needed evidence that would show achievement.

3.3 Resource Mobilisation

The overall objective of resource mobilisation is to make material reach people it is intended for. Considerations should be made to:

- determine resources needed for the efficient implementation of the curriculum/programme/module (financial, human, infrastructure, technological);
- develop the learning material;
 - synthesise quality requirements;
 - match learning with resources;
 - emphasise on learner centred approaches;
 - infuse Generic Skills;
 - determine the layout of the material;
 - sequence learning activities;
 - infuse self assessment questions/tasks;
- o determine the production cost and implications thereof;
- o determine availability of storage facilities; and
- determine the printing method;

3.4 Piloting

Piloting is done to determine the strengths and weaknesses of the developed material in order to take necessary remedial actions prior to its full implementation. The developer is expected to:

- o develop monitoring instruments for piloting;
- o identify institutions and/or learners for piloting;
- use a variety of learning methods;
- encourage and receive feedback from the learners and trainers on structure and content, approaches, duration and assessment strategies;
- o provide frequent feedback to the learners and trainers; and
- o use feedback for ongoing adjustments in the learning process.

3.5 Revision and Amendment (After Piloting)

Once the material has been piloted, the developer needs to:

- amend it, as necessary, in accordance with feedback from those involved in the trial run to meet the needs of learners, trainers and industry, based on data gathered during the pilot process; and
- o prepare the ground, or market it, for full implementation.

3.6 Implementation

At this stage it is considered that the material can be used to deliver the programme. However, care must be taken to ensure that the material would continue to:

- o support acquisition of relevant and appropriate knowledge, skills and attributes;
- show linkage of learning activities and the world of work;
- o address issues of content and application;
- o provide formative and summative evaluation, as well as feedback; and
- determine assessment resources;

3.7 Evaluation

Revision and review of the material should be done regularly, and must, as much as possible be linked to that of the relevant curriculum/programme/module.

In order to determine the value factor of the material, evaluation instruments must be developed and implemented to:

- determine the correlation between the identified needs and the impact of the material on learner's performance
- o establish support of learning material by learners, trainers and industry; and
- establish content and structural correctness.

4.0 SAMPLES

4.1 Sample 1: A variety of strategies

Learning Strategies

The samples below are linked to the HIV and AIDS Programme – BNVQF Level 1 (Foundation Level). They also 'show-case' a variety of learning strategies. The activities to be undertaken are broken down by the developer taking into cognisance the varying needs of learners. The resources and the necessary precautions are also identified. Due to the nature of the Programme, sensitivity to learners is emphasised.

Strategy	What to do	Resources	Cautions
a) Role Play			2 1 1
Before role play	 Understand the problem – gather information surrounding the infected and affected persons; Empathy – internalise circumstances; Identify conducive venue; Set the scene; Assign roles; Brief learners on their roles; and 'Break the ice'; 	 Props; Briefing cards; Scenario plans; and Learners/Players. 	 Props relevant to scenario; Scenario relevant to the subject matter; Some learners may get too far into the roles – eg by stigmatising the role players; Avoid discriminatory language;
During role play	 Start up the role-play (observe and guide as necessary); Manage the role play; Listen, read between the lines and note non verbal expressions (making note of the important points); Volunteer personal experience; and Answer and clarify issues; 		 Use appropriate language (jargon) to the subject matter at hand; and Be sensitive to issues pertaining to culture, gender and disadvantaged groups.
After role play	 Manage emotions and counsel; Take people out of roles played (de-couple); Evaluate and identify learning (ie check if the outcome(s) of learning have been achieved); Discuss the way forward and provide support; and Review and provide counselling if necessary 		

Strategy	What to do	Resources	Cautions
b) Demonstration	 Set a scenario; Explain procedures; Outline safety requirements; Carry out the demonstration; Evaluate; and Report 	 Models (mannequin, see through, cut away, plastic); Learners and facilitator; and Props. 	 Avoid discriminatory language; Emphasise safety requirements; Use language (jargon) appropriate to the subject matter at hand; and Be sensitive to disadvantaged groups.
c) Simulation	 Set a scenario; Assign tasks; Brief learners into tasks; Manage the tasks; and Evaluate and identify learning. 	 Props; Briefing cards; Scenario plans; Learners/Players; and Personal Computers and relevant software. 	 Props relevant to scenario; Scenario relevant to the subject matter; Avoid discriminatory language; and Use language (jargon) appropriate to the subject matter at hand.
d) Discussion	 Set a scenario; Define mode of interaction (method); Manage the discussion; and Evaluate and identify learning. 	 Learners; Props; Scenario plan; and Map, charts, graphs etc. 	 Scenario and props must be relevant to the subject matter; Statistics must be valid and reliable; and Use language (jargon) appropriate to the subject matter at hand.

Strategy	What to do	Resources	Cautions
e) Oral Presentation (Lecture)	 Prepare the presentation; Make sure the lecture theatre is ready for the session; Prepare material; Present stimulating the lecture by probing questions to include learners; and Evaluate the lecture. 	 Lecture theatre; Presentation material and equipment; Learners and facilitator; and Props. 	 Lecture material must be relevant to the vocational area; Manage time balance; Manage emotions; Be sensitive to disadvantaged groups; Avoid discriminatory language; and Use language (jargon) appropriate to the subject matter at hand.
f) Research	 Decide on and develop the research instruments; Set scenario; Brief learners on procedures (objectives, time frame, parameters, literature review, data collection, data analysis, data compilation); and Evaluate and report. 	 Scenario plan; Briefing session; Props; and Learners and facilitator research processes. 	 Maintain confidentiality; Observe ethics; Avoid discriminatory language; Information must be valid and reliable; Instruments must be valid and reliable; and Use language (jargon) appropriate to the subject matter at hand.
g) Mentoring	 Develop a plan; Define objectives/scope; Identify mentor; Agree on boundaries; and Evaluate and report. 	 Mentor; Mentee; Plan; and Draft agreements. 	 Be sensitive to confidentiality; and Avoid discriminatory language.

Strategy	What to do	Resources	Cautions
h) Educational Tours (visits)	 Plan the tour; Identify and contact appropriate authorities; Develop programme for the visit; Develop a task sheet; Brief learners; Develop a checklist/questionnaire for data collection by learners; Exchange views; and Evaluate and report. 	 Transport; Learners and facilitator; and Places to be visited; and Contact person at place to be visited 	 Use language (jargon) appropriate to the subject matter at hand; Avoid discriminatory language; Time allocation; and Maintain confidentiality.
i) Quiz	 Prepare relevant questions covering the relevant module or outcomes of learning; Administer quiz; Hand in quiz to facilitator; Analyse/tally response; and Evaluate response relating to learning. 	 Learners and facilitators Quiz sheet; References to relevant web sites, books, pamphlets etc; and Flipcharts, white boards, OHPs, OHTs markers, pens. 	 Ensure anonymity in responding to quiz; and Be sensitive to the learners.
j) Guest Facilitator	 Identify and contact appropriate guest facilitator; Agree on time, duration and venue; Give information on target group and module(s) or outcomes of learning to be covered; Brief learners on what they are expected to do; Inform the relevant authority (Principal, HOD); Receive and introduce facilitator to the relevant management and learners; Allow facilitator to take charge of the session; and Follow up activity with learners, relating learning to the module(s) or outcomes of learning. 	 Arrange venue with required equipment; Guest facilitator; Learners; Props; and Task sheet. 	 Ensure materials are appropriate for the audience (if possible pre-view the material); Be aware of sensitivity; and Inform facilitator of the language level of the target group

Guidelines for Developing Learning Materials

Strategy	What to do	Resources	Cautions
k) Video	 Preview video and edit (take numbers on counter to mark sections to be viewed); Prepare task sheets and handouts; Show video pausing at appropriate intervals/points; Give learners time to complete tasks; and Summarise discussions relating to outcomes of learning. 	 Learners/viewers; Video; Video equipment; Task sheets; and Handouts. 	 Try out equipment before use; Rehearse prior to session; Be sensitive to learners; Mentoring of some learners might be needed; and Trainer guidance might be needed for some categories of learners.
l) Experiential learning	 Experience; Reflect; Conceptualise; Apply (Colb Method); and Evaluate. 	 Target groups; Props; Facilitator; and Identified organisation/ environment for the experience 	 Manage audience; Emotional impact; Relevance of experience; and Be sensitive to the disadvantaged groups.

4.2 Sample 2: Jigsaw in 10 Easy Steps

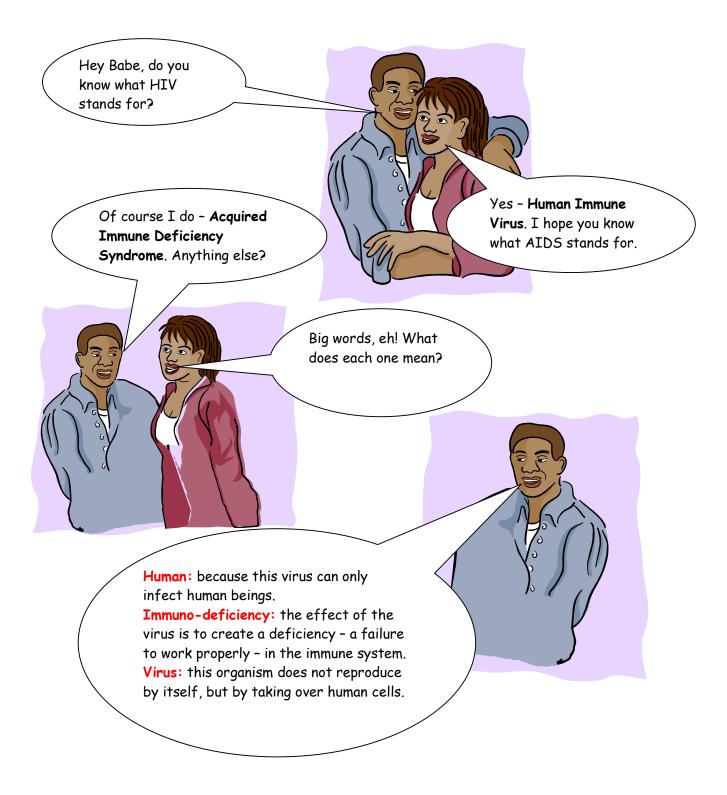
he steps below are meant to guide the trainer or supervisor of learning in administering a jigsaw learning session.

- 1. Divide learners into 4 persons per jigsaw group. The groups should be diverse but neutral in terms of gender, ethnicity, race, and ability.
- 2. Appoint one learner from each group as the leader. Preferably, this person could be the most mature learner in the group.

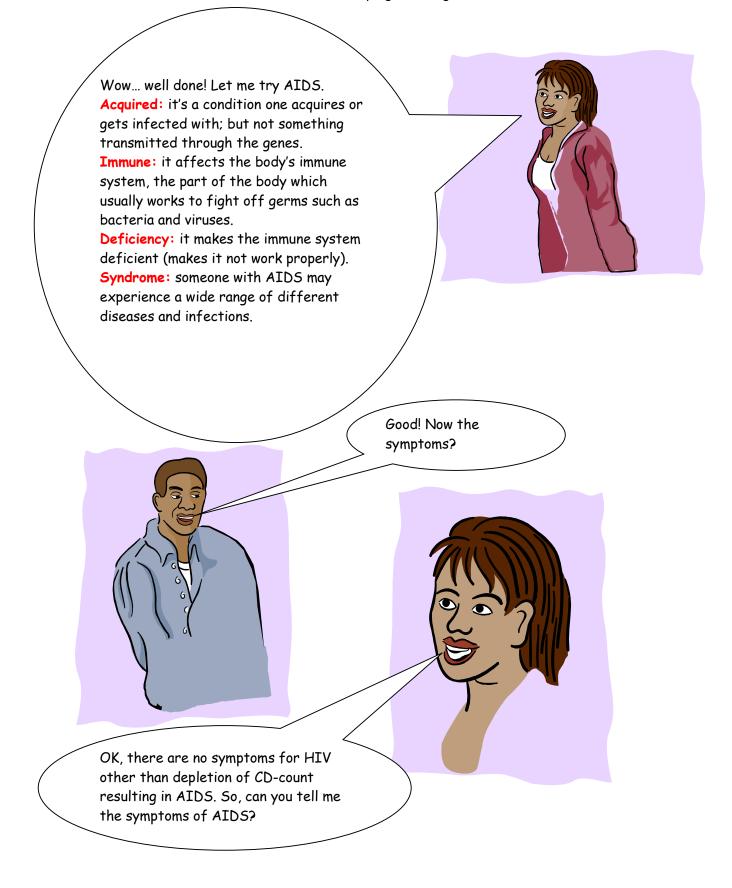
 Each group is divided into 4 learning tasks/segments. In this session the learners may, for example, be assigned to find information on the following HIV and AIDS issues: (a) Misconceptions and facts on transmission modes of HIV, (b) Appropriate diet for the HIV infected, (c) Signs and symptoms of Sexually Transmitted Infections (STIs), and (d) statistics on infection rates of HIV.

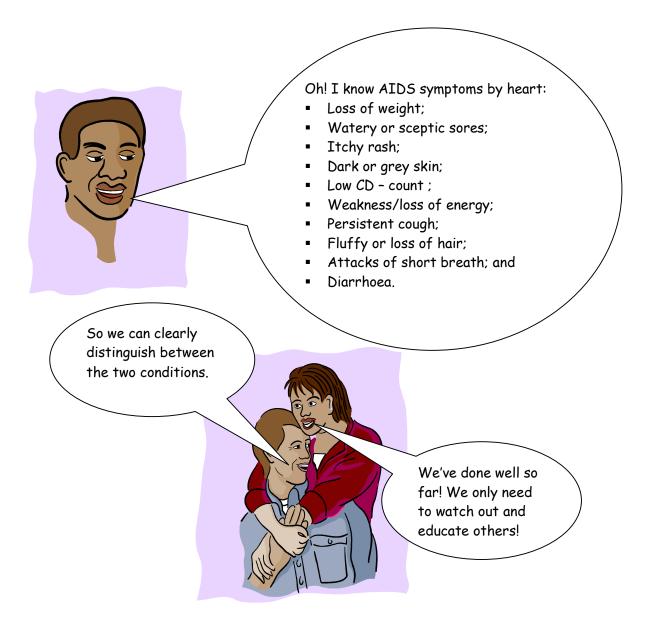
- 4. Give learners time to read over their respective tasks at least twice for each to become familiar with them. There is no need for them to memorise the task.
- 5. Assign each learner to take one task, making sure they have direct access only to their own learning task.
- 6. Form temporary "expert groups" by having one learner from each jigsaw group join other learners assigned the same task as his/hers ie, re-grouping learners according to the 4 tasks to be done. Give learners in these expert groups time to discuss the main points of their task and to rehearse the presentations they will make to their respective jigsaw groups.
- 7. Bring the learners back into their jigsaw groups ie the original groups.
- 8. Ask each learner/member to present his/her task to the group. Encourage others in the group to ask questions for clarification.
- 9. Float from group to group, observing the process. If any group is having problems (eg, a member dominating or being disruptive), make appropriate intervention. Eventually, it is best for the group leader to handle this task. Leaders could be coached by whispering an instruction on how to intervene, until the leader gets the hang of it.
- 10. At the end of the session, assess acquisition of the relevant KSAs. For instance an assessment task could be given on the tasks so that learners quickly come to realise that these sessions are not just fun and games, but do count.

4.3 Sample 3: Drama



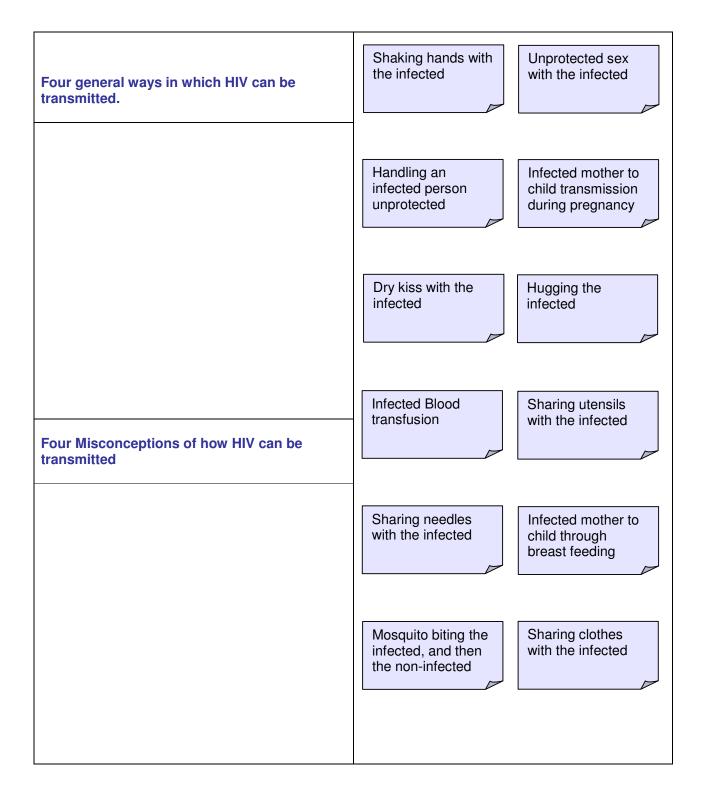
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4.4 Sample 4: Matching Questions

The learner is required to paste the sticker under the appropriate title.



5.0 **REFERENCES**

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- i) Ministry of Health (2002); *Masa Antiretroviral Therapy: The 100 Most Asked Questions About HIV/AIDS and ARV Therapy*; Gaborone; Ministry of Health
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- m) Werther W B and Davis K D Jr (1992); *Human Resource and Personnel Management;* 4th ed; Singapore; McGraw-Hill Inco.
- n) Your Dictionary.com (2004); *Your Dictionary;* [Online] <u>http://www.yourdictionary.com;</u> [Accessed January 2004].

6.0 **APPENDICES**

LEARNING MATERIAL DEVELOPMENT CHECKLIST

This checklist is guided by the quality principles for developing learning materials. The learning material developer and/or quality verifier will scrutinise the learning material(s) using the criteria below.

Checklist

QUALITY REQUIREMENTS	EVIDENCE	Institution Based Learning	Industry Based Learning	Distance and Open Learning
Foundation Learning material must be	 be relevant to industry needs so that they are capable of preparing the learner for the current and future trends in the world of work; 			
guided and supported by the aligned or outcomes	 be challenging but still appropriate for the level of the target group; 			
expressed curricula and they must	 adapt rather that duplicate the existing materials – eg reference materials, manuals; 			
	 be internationally comparable; 			
	 not violate copyright laws; and 			
	 indicate notional learning time 			

QUALITY REQUIREMENTS	EVIDENCE	Institution Based Learning	Industry Based Learning	Distance and Open Learning
Scope	 identify the relevant outcomes of learning or competencies, and support their acquisition; 			
Scope refers to the breadth and depth of the learning materials. In order to ensure that the scope is fit for	 relate to the appropriate target group(s) – ie flexible enough to accommodate the varying backgrounds – eg academic, training, work experience and abilities; 			
	 provide clear examples, explanations and illustrations; 			
purpose (eg suitable for the	 indicate resources needed; 			
target group and addressing the expected learning outcomes) developers need to	 provide accurate industry context to suit current and future work environment; 			
	 emphasise purpose of learning in terms of employment opportunities; and 			
	 Provide a list of recommended further reading. 			

QUALITY REQUIREMENTS	EVIDENCE	Institution Based Learning	Industry Based Learning	Distance and Open Learning
Structure and Design Learning materials	 be easy for the learner to navigate through; 			
must promote effective strategies for learning and assessment. They	 present a visually attractive design; 			
must also be easy for the learner to navigate through. Basically they	 provide activities and learning strategies designed to motivate the learner; and 			
must	 use words/language appropriate for level of the target group. 			

QUALITY REQUIREMENTS	EVIDENCE	Institution Based Learning	Industry Based Learning	Distance and Open Learning
Flexible Delivery Learning materials must consider that trainers, learners and assessors have varying needs, preferences and entry levels, therefore must	 provide a variety of learning methods; 			
	 provide for use in a variety of training contexts eg on job, off job and simulations; 			
	 provide guidance on entry requirements (especially for learning packages/self access material(s)); 			
	 be adaptable for use under different but similar conditions – eg making coffee is different from making tea but the process is more or less the same; 			
	 provide adequate user guides – ie other relevant reference materials like manuals, must be indicated; 			
	 provide guidance, as necessary, on safety, health and environment requirements; 			
	 cater for use by people with disabilities; 			
	 be challenging to cater for target population – eg homogeneous and heterogeneous groups; and 			
	 be linked to industry minimum performance requirements/standards. 			
	 highlight issues pertaining to modes of delivery – eg distance learning 			

Guidelines for Developing Learning Materials

QUALITY REQUIREMENTS	EVIDENCE	Institution Based Learning	Industry Based Learning	Distance and Open Learning
Access and Equity	 accommodate learners form different geographical locations; 			
	 accommodate cultural diversity; 			
In order for learning materials to be inclusive, they must	 challenge stereotypes of gender, ethnicity, creed and ability status, which can be corrected/reversed by use of non discriminatory words, pictures, illustration and examples; 			
	 be affordable in terms of purchase price/procurement; 			
	 be moderately colourful but attractive – not boring but not too colourful – Avoiding colours like orange and red; 			
	 be produced in a way that is cost effective – ie affordable by producers; 			
	 take Information Technology needs on board; and 			
	 provide guidance on training/learning and employment opportunities 			

QUALITY REQUIREMENTS	EVIDENCE	Institution Based Learning	Industry Based Learning	Distance and Open Learning
Content	\circ be interactive by keeping the target group engaged – ie tasks			
Content refers to	must adopt a practical approach, - eg role plays, projects,			
what goes into the	drama and surveys of living examples;			
learning material. It	\circ be presented in a language appropriate for the level of the user			
provides an	- eg the lower the learner's educational background the simpler			
elaboration of the	the language;			
expressed KSAs in	$_{\odot}$ be simple but yet challenging to the learner in order to sustain			
the curriculum. A	their interest;			
well-balanced	\circ simulate reality in terms of work requirements and problem	_	_	_
content must	solving – ie be realistic;			
	\circ assist the trainer's effort in delivering/implementing the			
	curriculum;			
	$_{\odot}$ be sufficient in parameters – not too much and not too shallow –			
	guided by the curriculum;			
	\circ Internationally and locally comparable and up to date;			
	\circ provide notional learning time frame; and	_	_	_
	\circ integrate and correlate theory with practice.			

QUALITY REQUIREMENTS	EVIDENCE	Institution Based Learning	Industry Based Learning	Distance and Open Learning
Feedback	 show the date on which the material was produced; 			
must promote self assessment for the learner and provide feedback to both the learner and the developer. They must:	 show the date of next review of the material; 			
	 provide a list of assessment questions/tasks/activities for the user; 			
	 include a questionnaire to evaluate the material; and 			
	 state the contact details of the producer. 			

DOCUMENT EVALUATION

In order to have feedback from you, we request you to fill in this evaluation sheet by ticking the appropriate boxes. Please submit your input in writing to the address sated on page 1 of this document.

Content

Content editing should be done by someone who is knowledgeable on the subject area to check if information presented is

	4	3	2	1
	Very Good	Good	Poor	Very Poor
Sufficient				
Relevant				
Coherent				
Correct and accurate				
Consistent				
Logically sequenced				

Structure

Structural editing may be done by someone who is not knowledgeable on the subject area to check for

	3	2	1
	Very Good	Good	Poor
Style			
Layout			
Punctuation			
Language	Very user friendly	User friendly	Not user friendly
Typographical errors	None	Few	A lot

Comments

Please give us a list of identified areas.