



Developing ODL curricula and learning resources

Guidelines for effective practice

This document outlines a process for curriculum and learning resource development for effective ODL provision. It suggests three core stages of curriculum design, course design and learning resource development which are inter-related. Examples are taken from a workshop held in Patna, Bihar State, India between 04 and 15 March, 2013.

Developing ODL curricula and learning resources:

Guidelines for effective practice

© SCERT Bihar



This work is licensed under a

[Creative Commons Attribution 3.0 Unported License.](https://creativecommons.org/licenses/by/3.0/)

This manual is the product of a collaborative effort involving: (in alphabetical order)

Abha Rani	Emteyaz Alam
Amita Mishra	Katyayan Kumar Tripartite
Andrew Moore	Manoj Kumar Tripathy
Dhananjay Dheeraj	Md. Wasay Zafar
Dilip Kumar	Mohan Das
Dr Archana	Neil Butcher
Dr Bir Kumari Kujur	Prabhas Ranjan
Dr Buddha Priya	Rachana Thrived I
Dr Giyandeo Mani Tripathi	Raj Kamal Shiromani
Dr Jessie Modi	Ranjan Sinha
Dr Kiran Sharan	Shashi Kant Sharma
Dr Lalit Kumar	Subodh Kumar Jha
Dr Md. Faiz Ahmad	Suman Kumar Singh
Dr Radhe Raman Prasad	Surya Kumar Jha
Dr Rakesh Kumar	Tejnarayan Prasad
Dr Ratna Ghosh	Tony Mays
Dr Rita Roy	Tulika Prasad
Dr SA Moin	Vikas Kumar
Dr Sarika	
Dr Snehasish Das	

Contents

Introduction	6
Curriculum design	6
Figure 1: A model for curriculum design	7
Figure 2: The learning package	8
Figure 3: The learning programme	8
Curriculum design decisions	9
Figure 4: Time management	9
Curriculum learner support decisions.....	10
Figure 5: The four institutional levels of support.....	10
Figure 7: Study centre support to distance learning.....	11
Figure 8: School support to distance learning	12
Figure 9: Use of independent study time	13
Curriculum decisions about the assessment strategy	13
Figure 10: The overall assessment strategy.....	14
Figure 11: Making space for formative assessment	14
Figure 12: Example entry level activity	15
Figure 13: Example exit level objectives	16
Figure 14: Example of an exit level activity for students close to graduating from the programme	16
Course design.....	17
Module/course/subject matrix.....	17
Figure 15: A course/module/paper planning template	18
Figure 16: A possible outline for the introduction to a paper (see Appendix 1 for a full example)	19
Figure 17: A possible structure for a unit of learning	21
Learning resource development.....	21
Key characteristics of distance learning resources	22
Orientation.....	22
Selection and coherence of content	24
Table 1: Characteristics of distance education materials	25
Presentation.....	25
View of knowledge and use of learners' experiences	26
Table 2: Analysis of educational decision-making	27

Language	28
Table 3: Examples of dialogue in DE materials	28
Layout and accessibility	31
Activities feedback and assessment	31
Detailed criteria	31
Learning activities and feedback.....	35
Variety.....	35
Table 4: Classroom possibilities ... (Adapted from: Carl 2009:96)	36
General structure	37
Purpose	41
What are good learning activities?	41
Purpose of activities.....	41
Promote learning	41
Support learners	42
Provide feedback	42
Online features	42
Structure and layout of activities.....	43
Types of activities.....	43
Table 5: Activity types and offline and online possibilities	43
Activities building comprehension.....	44
Activities building critical thinking	47
Activities building skills	49
Feedback	52
Fig 18: A model for online learning (Anderson 2008:61).....	53
Integrating media and technology.....	56
Table 6: Media and technology integration decision-making guide (extrapolated from earlier work by Alan Bates)	56
Table 7: Technology choices for different stages of the student walk at Unisa (from Mays 2011)	61
Concluding remarks	63
Appendices.....	64
Appendix 1: An example introduction to a module.....	64
Introduction to the module	64
What is the purpose of this module?.....	64

Why have a portfolio module at all?.....	64
What is covered in the module?	65
How does this module relate to the rest of the ACE?	65
How will this module be assessed?.....	65
What are the learning outcomes of this module?	66
Learning time	66
Teaching and learning	66
Appendix 2: Extract from a distance learning course exemplifying key design principles	69
Appendix 3: Example of a complete sub-section of distance education materials (available along with other OER at www.oerafrica.org).	77
Appendix 4: Extract from a contact-support distance learning programme showing the suggested structure of a unit of learning	85
Introduction	87
The Context for School Leadership	87
Distributed Leadership.....	87
Establishing a learning culture	87
Developing plans to manage and lead	87
Concluding remarks	87
Appendix 5: Illustration of the course design structure applied to a digital environment	99
Appendix 6: Draft example resources developed by SCERT staff in a workshop session.....	104
Demonstrating the relationship between different components of the programme.....	104
Demonstrating the links within units of learning, the integration of study skills and the tentative nature of knowing.....	107
Demonstrating appropriate integration of media, a conversational style and attention to sequential progression.....	112
Demonstrating the need to initiate a conversation that is rooted in authentic experience.....	116
Introduction	116
Objectives or outcome.....	117
Introductory Activity	117
Feedback	118
Demonstrating the ways in which a contact-based orientation could incorporate a shift towards an ICT-supported ODL model.....	118
Introductory Activity	119
Development Activity.....	120
Consolidation Activity	121

Summary	121
Self -Assessment	122
Conclusion	123
Consolidation Activity (At study centre)	123
Consolidation Activity (ICT Based)	123
Demonstrating the ways in which activities can be related to authentic real life experience...	123
Bibliography/useful references.....	132

Introduction

Distance learning provision seeks to provide high quality learning opportunities without necessarily requiring teachers and learners to be in the same place at the same time. This gives rise to two key ways in which distance learning provision differs from contact-based provision:

- the need to provide decentralised learner support
- the need to provide learning resources that students can work through largely independently.

Three interrelated processes are needed to ensure that the above key needs are met:

- Curriculum design
- Course design
- Learning resource development.

Curriculum design

When people think about curriculum, they often equate it with a syllabus that outlines the content to be covered and the way that it will be assessed.

However, we should really think more widely than this. We should consider not only WHAT should be taught and why, but also HOW it should be taught and how the teaching-learning process itself will be implemented. This is illustrated in Figure 1.

Figure 1 suggests that we start by considering what international, national, state and institutional requirements tell us about what should be the expected graduate or exit level competences of the programmes that we offer.

It then notes that we have to start where the students are. We need a clear idea of the profile of our entry level students in terms of their subject or disciplinary competences, their fundamental learning competences and capability for independent learning, their practical and ICT skills and their existing life and work commitments.

The curriculum should then chart a learning pathway to help students get from where they are at the start of the programme to where they need to be as graduates of the programme.

Most students require support in this process. The curriculum as plan therefore needs to consider how this support will be provided and what parts of the learning process are for independent study, what parts require group or work-based activities and also how students might seek support individually.

Many students will equate the curriculum with what we ask them to do for assessment. The assessment strategy is therefore also an important part of the curriculum planning process. It must provide evidence that the programme purpose is being met. In the case of the Bihar Diploma in Elementary Education through Open and Distance Learning (D. El. Ed – ODL), for example, the purpose is improved teaching practice resulting in improved pupil engagement and achievement.

Developing a curriculum

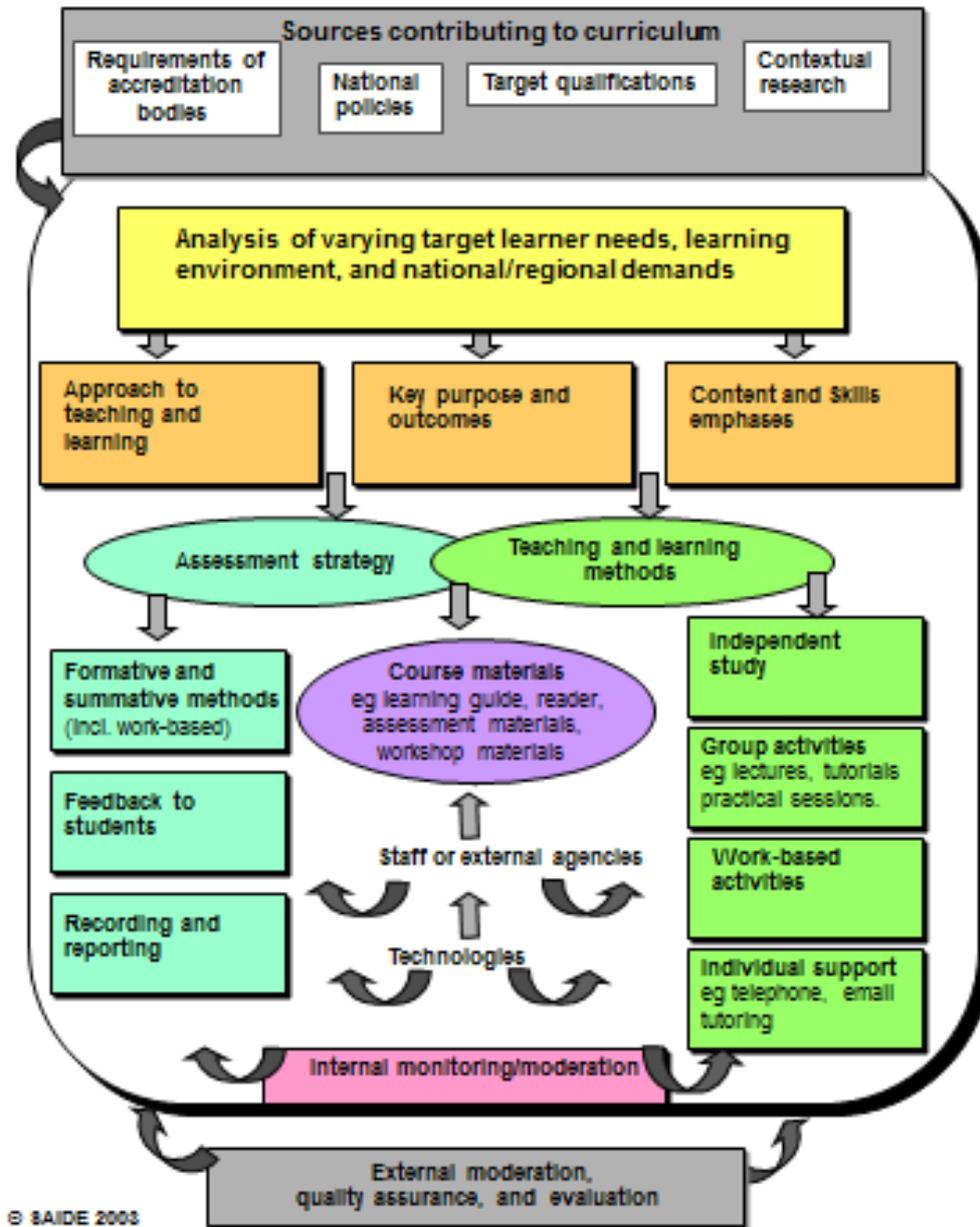


Figure 1: A model for curriculum design

The learning resources we provide are then only part of the bigger curriculum as illustrated in the following diagrams, Figures 2 and 3.

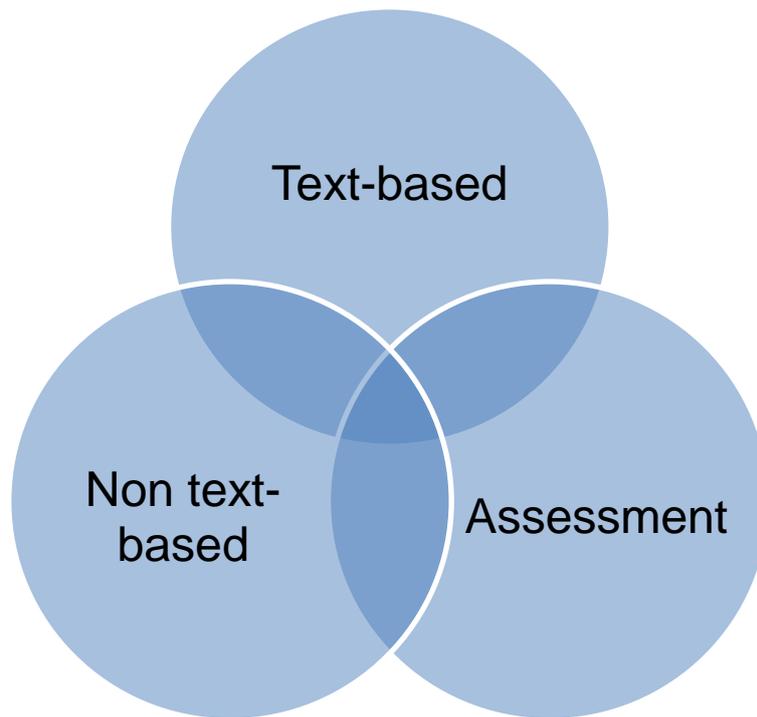


Figure 2: The learning package

The learning package comprises all the text-based, non-text-based (e.g. audio, video, multimedia) as well as assessment resources that we make available to students.

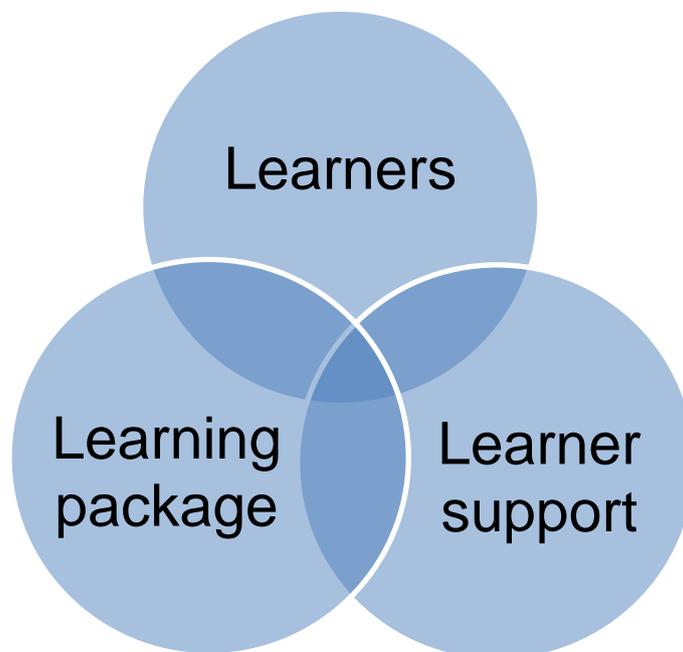


Figure 3: The learning programme

Looked at from the perspective of the student experience, the learning programme comprises the learning package as defined above, the interaction with other learners as well as the support they receive from the programme teachers, administrators and tutors/mentors. Among other things this will include a programme timeline indicating when assignments are due, when contact sessions or online discussions will be held and when examinations or other summative assessment will be scheduled.

We will now consider some actual examples of how these kinds of curriculum decisions might be made for a particular programme.

For the D. Ed (ODL), the Bihar State Curriculum has been adopted and the following decisions were made regarding the expected entry and exit level expectations of the programme, the ways in which learners will be supported and the ways in which they will be assessed.

Curriculum design decisions

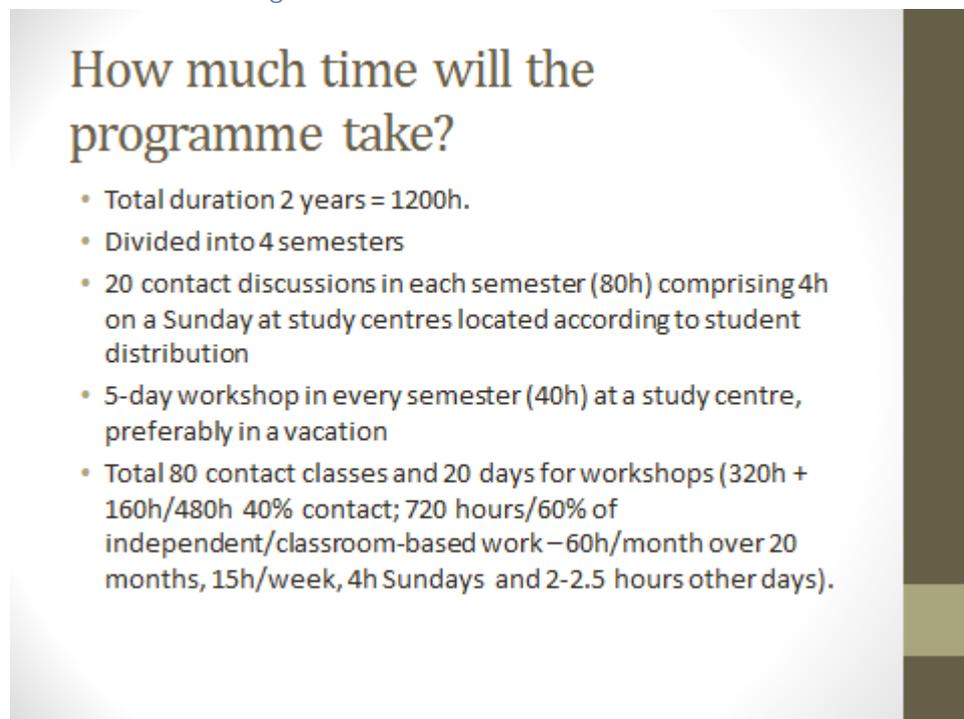


Figure 4: Time management

As indicated in Figure 4, the time allocation to this programme is 1200h – equivalent to a typical academic year of 30 weeks x 40h. For a distance learning programme to be credible, it must expect the same workload and level of engagement as an equivalent programme offered on a full-time contact basis. Typically, however, distance learners take 2-3 times the full-time duration to complete.

Time management is very important for distance learners as most are working and learning at the same time. Note that the daily workload includes work done in the classroom, such as trying out a new activity or approach, as part of normal teaching time. It is important to provide students with an

overview of timeframes and workloads at the start of the programme. This is carried through in learning resources by providing suggested time allocations for each activity the students need to do.

In order to make the workload more manageable for working students, it is also preferable to work in semesters so that students work on 5 Papers at a time (this still involves about 15 assignments and 5 examinations) rather than 10.

We then have to decide which Papers to begin with and why we put them at the beginning, for example:

- FP1 ICT in education (building competences used throughout the programme) 50
- F1 Perspectives of education (basis for all classroom decision-making) 60 + 40
- F2 Child development and psychology (basis for all classroom decision-making) 60 + 40
- F6 Teaching method of Mathematics (usually a challenging subject) 60 + 40
- F8 Teaching Hindi (language of learning and teaching) 60 + 40

...

Curriculum learner support decisions

For the D. El. Ed. (ODL), learner support resides in four different institutions as illustrated in Figure 5 below.



Figure 5: The four institutional levels of support

The various responsibilities of these institutions in supporting decentralised learners are detailed below. Each of the three types of institutions coloured green will be linked by ICT for two-way communication within a learning management system housed at SCERT.

How are students supported by SCERT?

- Ensures the curriculum meets national and state requirements.
- Develops learning resources to support the curriculum.
- Creates a content repository comprising OER materials (internal and foreign) and collecting and digitising available resources with Bihar SIET and other SIETs.
- Develops summative assessment instruments to support the curriculum for year 1.
- Liaises with BSEB for summative assessment in year 2.
- Monitors the quality of provision at study centres.
- Hosts and maintains an integrated ICT system.
- Tracks student progress, identifies students at risk and initiates supportive interventions if not already in process.
- Ensures each district is represented.
- Comprises the following suggested departments: Student support, Academic, Administrative, Training and Material supply divisions.
- Retains a Documentation Cell in the short term to archive documents.

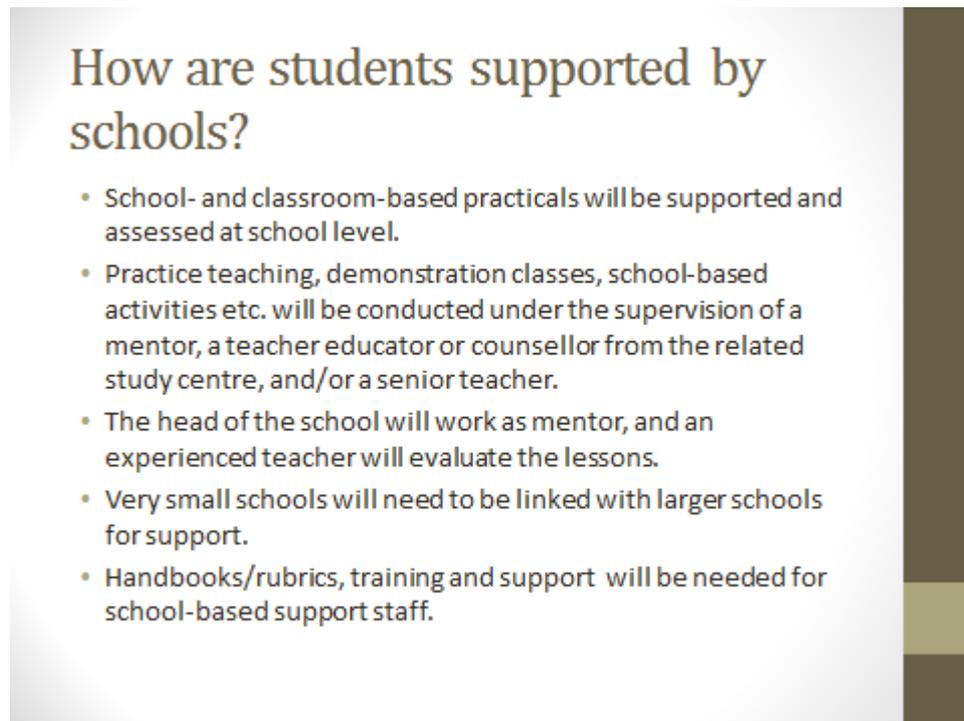
Figure 6: SCERT support to distance learning

How are students supported by study centres?

- A study centre may be a DIET, PTEC, BRC or CRC (ICT infrastructure will need to be developed at all centres; HR capacity will need to be developed at BRCs/CRCs before they can become fully-fledged study centres as they mostly lack qualified teacher educators). Five districts do not have a DIET or PTEC. We would need to upgrade a BRC in these districts.
- There will be weekly meetings at study centres for discussions on progress and challenges, including lessons planned and taught for the programme, and to download materials updates, upload assignments and/or contribute to ongoing discussions. Each session involves groups of 30-35 teachers. Discussions are led by qualified teacher educators.
- Students also attend a 40h orientation workshop each semester at designated study centres.
- The study centre teacher educator tracks student progress and escalates common problems up to nodal DIET/PTEC or to SCERT staff as appropriate.
- Students write exams at study centres.
- Initially, 39100 students will be accommodated progressively over the period 2013–2016.

Figure 7: Study centre support to distance learning

Study centres are the main curriculum access point for students. Study centres are supported by nodal DIETs or PTECs (which might also be study centres in their own right).

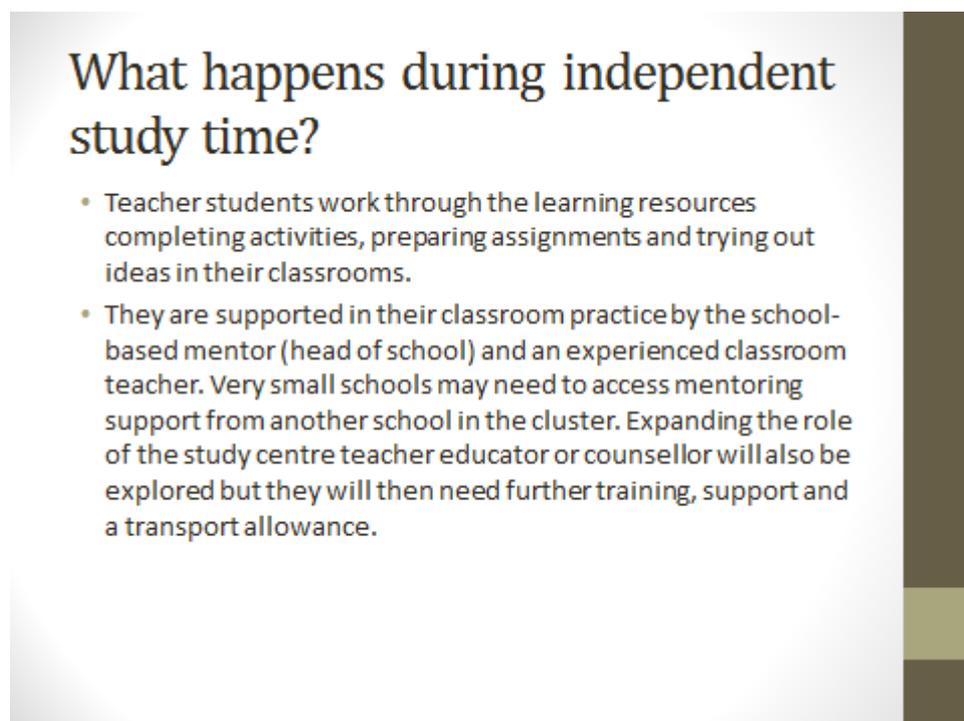


How are students supported by schools?

- School- and classroom-based practicals will be supported and assessed at school level.
- Practice teaching, demonstration classes, school-based activities etc. will be conducted under the supervision of a mentor, a teacher educator or counsellor from the related study centre, and/or a senior teacher.
- The head of the school will work as mentor, and an experienced teacher will evaluate the lessons.
- Very small schools will need to be linked with larger schools for support.
- Handbooks/rubrics, training and support will be needed for school-based support staff.

Figure 8: School support to distance learning

Students spend only 40% of their time in face-to-face contact sessions. The other 60% of the time is spent on independent study. What do students do during this time?



What happens during independent study time?

- Teacher students work through the learning resources completing activities, preparing assignments and trying out ideas in their classrooms.
- They are supported in their classroom practice by the school-based mentor (head of school) and an experienced classroom teacher. Very small schools may need to access mentoring support from another school in the cluster. Expanding the role of the study centre teacher educator or counsellor will also be explored but they will then need further training, support and a transport allowance.

Figure 9: Use of independent study time

Curriculum decisions about the assessment strategy

We said earlier that for students, the curriculum is often reduced to what we ask them to do for assessment. So the assessment strategy must require evidence that students have fulfilled the purpose and achieved the objectives of the programme as a whole.

Distance educators place a particular focus on assessment because assessment, learning and teaching are inter-related and assessment tasks are sometimes the only opportunity for us to engage with the individual student, who may choose not to take advantage of the variety of support strategies we make available. In an outcomes- or objectives-based system, assessment receives a particular priority focus in programme design and implementation (CoL 2005; DoE 2003, 2005; Killen 2000; Maree and Fraser 2004; SAQA 2005a,b) because of the need to understand whether or not learning outcomes/objectives are being achieved and how we should respond if they are not.

Consider, however, the following assertion from a seasoned distance education practitioner:

"If we wish to discover the truth about an educational system, we must look into its assessment procedures. What student qualities and achievements are actively valued and rewarded by the system? How are its purposes and intentions realised? To what extent are the hopes and ideals, aims and objectives professed by the system ever truly perceived, valued and striven for by those who make their way within it? The answers to such questions are to be found in what the system requires students to do in order to survive and prosper. The spirit and style of student assessment defines the de facto curriculum." [Rowntree, 1987:1]

Following this line of argument, what we ask students do as tasks for assessment should demonstrably relate directly to the exit level outcomes of the module, and the programme(s) to which it contributes, and determine the kinds of activities designed into the materials, the content and context students engage with in completing these activities and the nature of the feedback provided (e.g. content/process, individual/peer, closed/open etc.) (Freeman & Lewis 1995; Kenyon, Kenyon, Mtaka and Masingana 2000; Mothata, van Niekerk and Mays 2003; Beets and le Grange 2005). The assessment strategy needs to be decided up-front during the design phase (CoL 2005; Randell 2006).

Distance education has some different characteristics from more traditional contact-based tuition. What then are the implications for assessment at a distance?

Well, the overall assessment strategy should ideally do the following kinds of things:

- provide sufficient formative feedback to help students to check their progress against the intended learning outcomes and assessment criteria
- provide sufficient evidence to allow students and teachers to diagnose potential problems and areas of strength
- provide sufficient guidance and feedback to maximize student chances of success
- provide reliable summative evidence of student achievement so there can be no doubt that they have met the exit level outcomes and earned a qualification they can be proud of

- provide support to student time management by staggering assignments and workloads so that they can be sure that they cover the complete programme adequately in the time they have available
- provide students with motivation to succeed by encouraging them to relate their studies to their own working/ potential working and/or learning environment and problems and through the provision of encouraging and realistic feedback
- provide a clear sense of progression and development by linking assignments and modules so each one builds on what has gone before (adapted from Raggatt in Lockwood, 1994:138; Morgan & O'Reilly, 1999:80).

So what decisions were made for the D. Ed. (ODL)?

How is the programme assessed?

- Assessment involves a combination of assignments, presentations, case studies, projects, group work, group discussions, teaching practices, demonstration classes, simulation classes, critical lessons, final teaching, observations (by senior teachers in schools), summative or theory final examinations . 50 + 50 for applied theory and practicals.
- A group of students may also be attached to a teacher educator/counsellor for evaluations of some assignments, projects

Figure 10: The overall assessment strategy

What are the assignments for internal assessment?

- Possible assignments in each unit : 10-12
- No. of assignments students must do in one paper/ semester: 03
- Nature of assignments for internal assessment
 - Project work 14
 - Case study 12
 - Group discussion/ book review 14
- No. of assignments students must do in ICT, work experience, etc./ semester: 02

Figure 11: Making space for formative assessment

It is important to make provision for formative assessment. Students submit an assignment and get feedback before they submit the next assignment, so that they can improve. Cumulatively the assignments prepare students for the summative assessment.

In the case of the D. Ed. Ed. (ODL), students will also be guided towards compiling a portfolio of evidence of practice so that they create a record of their growth in understanding and proficiency across the programme.

We also said that the curriculum should create a systematic learning pathway from where students are to where they need to be as graduates. This is illustrated by the following examples of an entry level activity, exit level objectives and an exit level activity designed for the D. Ed. Ed. (ODL).

Example Entry Level Activity 1

- **Breaking the ice:**
- **Ask students to introduce themselves by turn**
- **Each student will tell her name and the school she comes from**
- **Each student will also tell a few lines about her model teacher (a teacher whom she praises)**
- **The next student will introduce herself and also tell about the name of the student preceding her, including what she told about her model teacher. She will also tell about her own role model as a teacher**

Activity (contd)

- **This will continue till all students have introduced themselves**
- **The teacher educator/counsellor will take note of the points spoken in favour of the role model teachers of each student.**
- **After the introduction is over, the teacher educator/counsellor will initiate discussion/ dialogue on the qualities of a teacher.**

Figure 12: Example entry level activity

What are the exit level competences we expect to achieve?

Graduates of the programme should be better able to demonstrate proficiency in:

1. Selecting, adapting, and implementing appropriate teaching skills, methods and techniques
2. Integrating ICT effectively both in the classroom and in their administration of teaching and learning
3. Facilitating the teaching-learning process more effectively with evidence of improved pupil achievement
4. Engaging pupils in the co-construction of new knowledge in the classroom
5. Nurturing pupils to become better citizens
6. Managing the classroom effectively
7. Reflecting on and justifying practice with reference to applicable theory, policy and contextual realities.

Figure 13: Example exit level objectives

What are our expectations of graduating students? Example activity 1

- (1) After completion of the course, teachers should be able to select any topic of their choice;
- (2) plan it and justify their planning in terms of theory, policy and contextual realities;
- (3) teach it in a classroom situation in the presence of peers and a teacher educator;
- (4) engage in constructive critical reflection with their observers on the basis of an agreed rubric;
- (5) and make an informed argument for changed practice the next time they teach the concept if this is indicated.

Figure 14: Example of an exit level activity for students close to graduating from the programme

Having got a good idea of what we want to achieve with the curriculum as a whole, we can then begin designing the various courses which constitute the programme.

Course design

A programme comprises various smaller courses/modules/papers.

We need to go through a similar process as for the curriculum design, but in a more focused way within a particular disciplinary area.

The following template could be overwritten as a way of planning a course/module/paper.

Module/course/paper matrix

Title:	e.g. Learners and Learning
Code:	e.g. LAL101A
Level:	e.g. 5 (first year)
Credits:	e.g. 12 (120 hours)
Purpose:	e.g. To enable students to reflect upon their planning and practice in ways that are grounded in four key learning approaches: behaviourism, cognitivism, (socio-) constructivism and connectivism and in ways that see these as not being mutually exclusive positions
Exit level outcomes:	e.g. By the end of the module, student-teachers should be able to: <ul style="list-style-type: none"> • outline the key elements and theorists associated with behaviourist, cognitivist, constructivist and socio-constructivist, as well as connectivist approaches • identify potential strengths and weaknesses of these different approaches for classroom practice • analyse examples of planning (documents) and teaching (audio and video as well as direct observation) • plan a lesson and justify their planning decisions in relation to appropriate theory • teach a lesson and then reflect critically on the experience in terms of what worked, what did not work, what might be done differently and any departures from the plan in practice.
Formative assessment 1	Post to online discussion forum. <ul style="list-style-type: none"> • This activity counts 5% towards the final module mark. • In not more than 100 words, students describe a classroom experience from when they were a school learner that had a deep impact on their attitude to learning. They should speculate on what assumptions about learners and learning informed the teacher's practice. • They should then comment on the postings of 3 other students.
Formative assessment 2	Written assignment to be submitted online. <ol style="list-style-type: none"> 1. This activity counts 25% towards the final module mark. 2. In Word, plan a lesson for the subject and level in which they specialise. 3. Provide a narrative explaining why they have planned the lesson in this way making reference to appropriate learning theory. 4. Ask a colleague to comment on their draft before submission using 'track changes'. 5. Submit both the annotated draft and their final draft for submission. 6. They should receive feedback from their tutor within 3 weeks of submission.
Summative assessment	Practical activity and written assignment. <ol style="list-style-type: none"> 1. This activity counts 70% of their final module mark. 2. Revise the lesson plan they developed previously in light of feedback received. 3. Teach the lesson.

	4. In Word, they write a reflective account of the lesson. Describe accurately what actually happened. Evaluate what worked, what did not work, what could be done differently and any departures from the plan. Support their description and evaluation with reference to appropriate learning theory.	
Unit	Core concept(s)	Key activity(ies)
1	Every day and school-learning	Blog
2	Behaviourism	Quiz Blog on pros and cons
3	Cognitivism	Quiz Forum discussion on pros and cons
4	(Socio-)Constructivism	Quiz Wiki on pros and cons
5	Connectivism	Quiz Chat on pros and cons
6	Theory and practice 1: planning	Wiki (on example) Forum discussion
7	Theory and practice 2: practice and reflection	Wiki (on example) Forum discussion

Figure 15: A course/module/paper planning template

The template provided flows from an assumption that teaching is a purposeful activity and that we should have a clear idea of what we want to achieve and what we want students to know/be able to do/ or to feel differently as a result of working through the learning resources. We need to think about what students will need to provide in the way of evidence of their achievement for summative purposes, how we will prepare for that through formative assignments (and feedback thereon) and how the activities in the learning resources will in turn prepare the ground for the formative assessment.

We can then sequence the topics/themes we want to cover and begin thinking about what would be appropriate activities for the content that has been covered. In the template in figure 15, for example, a wiki seems like a very appropriate kind of activity to reflect a socio-constructivist approach while a chat, in contrast, might better capture the dynamic nature of learning associated with a connectivist approach. We will consider guidelines for writing good activities a bit later.

Once we begin developing our courses, it is important to provide a clear introduction to the course, what it entails and how it fits within the larger programme. A typical structure for the introduction to a course/module/paper might include answers to typical student questions as illustrated below.

Introduction to the paper

What is the purpose of the paper?

What is covered in the paper?

How does the paper relate to the rest of the programme?

How will the paper be assessed?

What are the objectives of the paper?

How much time will be needed?

How does the paper teach?

Figure 16: A possible outline for the introduction to a module/course/paper (see Appendix 1 for a full example)

It is helpful for independent distance learners if learning resources follow a similar format and design.

The example below provides a template that can be adapted for different papers and purposes.

Design of a unit of learning

Paper & Course Code:

Semester:

Module:

Unit Title:

Time Allocation:

Introduction

1. What is the purpose of the unit? How does it link to what has gone before? How does it link to what is still to come?
2. Pose an open question of which there is no quick and easy answer to the students, the investigation of which, will provide a purpose for each of the activities and content sections below.

Objectives

By the end of the unit, you should be better able to:

- 1) Plan a lesson on a topic of your choice and explain your planning decisions
- 2) Teach the lesson you have planned, departing from or adapting the plan as necessary in response to the needs of different pupils
- 3) Critically reflect on your plan and practice based on your experience of teaching the lesson
- 4) Change the plan for the next time you teach this topic so that you will teach it better.

Introductory Activity for self-study

Create an activity that gets the students reflecting on what they already know but also challenges their knowledge and shows the need for more learning.

Feedback

Provide some feedback to the above activity that also introduces the next content/activity cycle.

Content 1

If required provide content for the students to read. The content should work towards a solution to the open question posed in the introduction.

Development Activity for self-study

Students need an activity where they engage with the content. Ask them to do something with the content such as, recall information – comprehend the meaning – apply content in new situations – analyse usefulness for their own contexts – synthesize the content with other information the student already has – create something new that uses the content as a building block.

Feedback

Provide some feedback to the above activity that also introduces the next content/activity cycle.

Content 2

Development Activity for self-study

Feedback

Repeat, Content | Development Activity | Feedback, as needed.

Consolidation Activity for self-study

This activity allows the student to demonstrate that they have achieved the outcomes or objectives stated at the beginning of the unit. It could also be a consideration of the original open question to see if they now have the knowledge and skills to answer it.

Summary

The main points of the unit are briefly identified in a concise manner. A bulleted list could be used.

Self-assessment

It is useful to provide an opportunity for students to reflect on whether they have met the objectives of the unit.

Conclusion

Link what has taken place in the unit to what has come before and what is still to come so that the unit is seen as part of a process rather than a discrete unit.

Group discussion activity for the study centre contact session

This provides an opportunity for students to reflect on any challenges they encountered in working through the learning resources, to share and discuss the findings of any school- or classroom-based activities they completed, and to further consolidate the learning through additional activities designed specifically for pair/group work.

ICT integration activity for the Sunday study centre contact session

This provides an opportunity for students to practise their ICT skills by completing a course-related ICT-based task while at the study centre e.g. complete a self-assessment quiz, develop a Powerpoint presentation on what they have learned, write a short blog, contribute to a wiki-based review of the learning resources etc.

Figure 17: A possible structure for a unit of learning

Here is a summary of useful steps and issues in the planning and development process:

Suggested Steps

- **Develop learning outcomes**
- **Allocate outcomes to various units of the course**
- **Plan assessment at the end of the course as well as during the course**
- **Decide the kinds of activities needed to achieve the outcomes of the unit**
- **Decide the examples needed to enable learners to learn each outcome**
- **Identify any graphics/multimedia inputs needed**
- **Plan the self-assessment needed for that unit**
- **Write in-text questions for self assessment/feedback**
- **Include summing up**
- **Test & evaluate the materials**

Learning resource development

As noted at the start of this discussion, one of the two key distinguishing features of distance learning provision is the development of resources designed for independent learning. This section of the manual provides some guidelines on the design of distance learning materials.

In terms of learning design, a key indicator for distance education is the way in which the materials tell a coherent story and unfold an argument that can be followed in a context of independent study. Linkages between modules, between units, between sections of units and between activities, feedback and core content are central to this.

Write sections and sub-sections

- So as to arouse attention and motivate them
- Link up with previous knowledge
- Provide in-built guidance for learning or suggest activities for learning in between
- Build their self confidence
- Provide feedback (through in-text questions)
- Facilitate retention (tables, graphics, flow charts, etc. in between and summarizing at the end)

The South African Institute for Distance Education (see www.saide.org) has developed the following useful set of guidelines for evaluating the appropriateness of learning resources for distance learners. The guidelines may also be used as a checklist when developing such resources.

Key characteristics of distance learning resources

The Saide criteria cover the following areas:

- Orientation to programme, introductions, aims & learning outcomes
- Selection and coherence of content
- Presentation of content
- **View of knowledge and use of learners' experience**
- Activities, feedback and assessment
- Language
- Layout and accessibility.

Orientation

This category for review is about the way that clear and relevant information can motivate and direct learners effectively in their study. Learners need to understand from the outset the requirements of the various components of the course. As learners, they need to be motivated by relevant introductions and overviews within each individual module/unit. They also need to be clear about what they have to achieve in each unit and these aims and learning outcomes should be consistent with the goals of the course.

What Are Learning Outcomes?

- Statements of intent (what the learner should be able to do as a result of studying the particular unit)
- Learner competency/objectives related statements
- Enhance the Cognitive Domain connected with thinking and knowledge, There are six levels under this domain:
 - Knowledge
 - Understanding/Comprehension
 - Application
 - Analysis
 - Synthesis
 - Evaluation

Learning objectives

- Objectives are also 'advance organisers' before the contents are presented to the learners. Advance organizers are: short sets of verbal or visual information; presented prior to learning a larger body of 'to-be-learned information'; and meant to generate logical relationships amongst the elements in the 'to-be-learned information' (Mayer, 1"objectives should state what the student should be able to do after the learning experience that he/she could not do before"(Mager, 1990).
- The objectives should be relatively unambiguous using action verbs;
- The conditions of performance should be stated
- The standard of the student's expected performance should be indicated

Framing outcomes or objectives

- **Verbs to avoid (too vague to assess easily)**
- Accept, appreciate, be aware of, consider, enjoy, examine, explore, have a good grasp of, know, realise, recognise, understand
- **Verbs to use (think about the different levels of demand implied)**
- Break down, calculate, categorise, change, combine, compare, compile, compose, compute, contrast, convert, create, criticise, define, demonstrate, describe, design, devise, differentiate, discover, discriminate, discuss, distinguish, estimate, explain, give example, identify, illustrate, draw inference, interpret, judge, justify, label, list, match, measure, modify, name, operate, organise, outline, paraphrase, point out, précis, predict, prepare, produce, re-write, recall, select, separate, show, solve, state, sub-divide, summarise, transform, translate, use

Examples

- By the end of this unit you should be able to name the capital cities of South America.
- • By the end of this unit you should be able to solve
- • By the end of this unit you should be able to critically evaluate
- By the end of the unit, learners should be to:
 - • explain the function of a word processor
 - • start a word processing program
 - • create a new document
 - • type and correct text in paragraphs
 - • save a document.

Selection and coherence of content

What is at issue here is rigour, interest and relevance. The content should be well-researched, up-to-date and relevant to the South African context. The learners should also be able to see how the content is related to the learning outcomes and goals of the course. Coherence is also important. If the components of a course are contradictory or unrelated to each other, the impact of the course will be considerably lessened.

The following table, adapted from a 1993 workshop run for Saide by Fred Lockwood of the Open University, summarises some of the main differences between traditional textbooks and self-

instructional materials which might be a useful tool for self-assessment for subsequent materials development. It is interesting to note that as resource-based learning gains ground, so more and more textbooks reflect self-instructional principles.

Table 1: Characteristics of distance education materials

Some differences between textbooks and DE materials	
Textbooks	DE courses
Assume interest	Arouse interest
Written for teacher use	Written for learner use
No indication of study time	Give estimates of study time
Designed for a wide market	Designed for a particular audience
Rarely state aims and objectives	Always give aims and objectives
Usually one route through	May be many routes through
Structured for specialists	Structured according to needs of learner
Little or no self-assessment	Major emphasis on self-assessment
Seldom anticipate difficulties	Alert to potential difficulties
Occasionally offer summaries	Always offer summaries
Impersonal style	Personal style
Dense layout	More open layout
Readers views seldom sought	Learner evaluation always conducted
No study skills advice	Provide study skills advice
Can be read passively	Require active response
Aim at scholarly presentation	Aim at successful learning

Presentation

This is to do with how the content is taught. There is no one 'right' way to teach content - it will vary according to the subject and the audience. However, there are certain pointers for a reviewer. These include, clear explanation of concepts and a range of examples, as well as sufficient and appropriate ways for learners to process new concepts, rather than merely learn them off by heart.

Desirable features 1

- **learner choice of task or situation**
- **authentic, real-world tasks**
- **case studies**
- **complexity of the real world represented in the tasks**
- **collaborative learning tasks**
- **opportunities to learn from observing others (e.g., trainee teaching as observer in a classroom, modelling in a study centre group)**
- **the learning package tends to be open-ended in terms of what is to be learnt (i.e. include suggested further reading for faster learners ...)**

Desirable features 2

- learning objectives,
- • tasks broken down into small steps,
- • learners assessed against the stated learning objectives,
- • a wide variety of tasks but within the scope of the stated objectives,
- • material 'chunked' into small, meaningful pieces,
- • mnemonics used to aid memory,
- • advance organisers used to help learners see the structure of the topic, and
- • simplification of the real world.

View of knowledge and use of learners' experiences

In many contexts, where rote learning and authoritarian views of knowledge have been the norm, particular attention needs to be paid to the way knowledge is presented. The perspective we would wish to promote is that knowledge should be presented as open and constructed in contexts, rather than merely received in a fixed form from authorities. Learners should be given opportunities to interrogate what they learn, and their prior knowledge and experience should be valued and used in the development of new ideas and practices. Frequent opportunities and motivation for application of knowledge and skills in the workplace, where relevant, should be provided, but this should be done in a reflective rather than mechanical way.

An underpinning epistemology, whether implicit or explicit, will affect the pedagogic choices made in programme and course design and materials development. In general, materials often do not build sufficiently from the assumed prior learning and experience of the students and tend to present content in an unproblematic way – as though there were only one interpretation of reality. Materials tend not to set up opposing view-points even though at a higher education level, students should be able to cope with two or more viewpoints. Objectives and activities are at the lowest level of Bloom's or the SOLO taxonomy. A key characteristic of most progressive education systems is high expectations of learners but it in many ODL course materials there are few demands in the materials on the more gifted learners. It would seem useful to pause and reflect on what epistemological and pedagogical assumptions a programme of study wishes to espouse and promote. The following table and discussion may prove useful.

Table 2: Analysis of educational decision-making

Analysis of educational decision-making			
<p>Communicating the curriculum</p>	<ul style="list-style-type: none"> • Outcomes and content finalised before programme. Apply to all learners. • All learners start and end at the same time and follow the same study sequence. • Emphasis on providing content through lectures/ printed materials/ multi media/ ICTs. • Use of generic tutorial letters offering assignment model answers/ provision of model answers to tasks. • In-course activities few or used to consolidate memorisation on content. • Tutor/materials developer seen as expert transmitting knowledge. 	<ul style="list-style-type: none"> • Outcomes and content finalised before start but programme offers core and elective options. • Continuous enrolment, but same study sequence for all learners. • Emphasis on providing resources and scaffolding to enable learners to construct their own understandings, through tutorial in print; 1- 1 contact tutorials, emails, teletutoring, internet. • Emphasis on individual formative feedback on assignments. • In course activities require learners to construct and demonstrate their own understanding. • Tutor/materials developer seen as scaffolding learning opportunities. 	<ul style="list-style-type: none"> • Outcomes and content negotiated with learners before start of programme. • Continuous enrolment and modularisation allows multiple pathways. • Emphasis on providing resources that reflect multiple perspectives and inviting discussion in print, via email, via website, in small group contact tutorials. • Emphasis on formative feedback on both individual and group tasks; feedback as continuation of discussion. • In course activities favour discussion with others and examination of multiple viewpoints.
<p>Engaging with the curriculum</p>	<ul style="list-style-type: none"> • Assume that learners have appropriate study skills. • Learners expected to master content. • Emphasis on recall in activities, assignments and examinations. 	<ul style="list-style-type: none"> • Enable reflection on and development of metacognitive skills. • Learners expected to construct own understanding; therefore concern with both product and process. • Emphasis on problem identification and problem solving in activities, assignments and examinations. 	<ul style="list-style-type: none"> • Enable reflection on and development of metacognitive and social skills. • Learners expected to co-construct knowledge with others therefore emphasis on process. • Emphasis on critical analysis and open-ended discussion.
<p>Applying what has been learned</p>	<ul style="list-style-type: none"> • Assessment by tutors only. • Assessment tasks require recall. • Assessment tasks include assignment content tests; examinations 	<ul style="list-style-type: none"> • Assessment by self and others. • Assessment tasks require application of knowledge to authentic situations. • Variety of individual assessment tasks, including portfolios. 	<ul style="list-style-type: none"> • Assessment by self, peers, tutors. • Assessment tasks require critical reflection and application in congruent real-life contexts. • Variety of assessment tasks including group tasks.

Analysis of educational decision-making			
Typical resources	<ul style="list-style-type: none"> • Single prescribed textbook 	<ul style="list-style-type: none"> • Prescribed and recommended mixed resources; with intent to set up debates 	<ul style="list-style-type: none"> • No limits on resources consulted including idiosyncratic resources and resources co-constructed as part of the learning process
Adapted from: Mays 2004:52			

In practice, distance education programmes are likely to reflect a range of features across the table. However, programme design which is influenced by an underpinning theory associated with behaviourist/ utilitarian thinking, is likely to be dominated by the kinds of characteristics outlined in column 1. Programme design which is influenced by constructivist thinking, drawing in particular on the work of Piaget, is likely to be dominated by characteristics from column 2. Programme design which is influenced by socio-constructivist thinking, drawing on the work of Vygotsky, is likely to display the kinds of characteristics outlined in column 3. Current thinking on what constitutes quality distance education practice, tends to favour the kinds of characteristics outlined in columns 2 and 3.

Language

Aside from the obvious importance of clear, coherent language at an appropriate level for the learners, the kind of style that is used is crucial. The style can alienate or patronise the reader, or it can help to create a constructive learning relationship with the reader. Style needs to be judged in terms of specific audience and purpose, and so a standard set of criteria is not useful. However, it is always helpful if new concepts and terms are explained and jargon is kept to a minimum.

It is important in ODL materials to engage in a dialogue with the students. The following notes and examples may prove useful.

In order to fulfill the teacher's role in the text, it is important that the writer of a distance education course establishes an ongoing and personal dialogue with the learner. In the classroom, the teacher talks to the learners: he/she will explain the goals of a particular lesson, introduce topics, ask questions and answer them, guide learners through difficult topics and ideas, give feedback, and motivate and encourage her learners. Distance education learners are as much in need of this ongoing dialogue as the learners sitting in the classroom. Adapted from Lewis (1981) below are some examples of attempts to establish and maintain this sort of dialogue in printed DE material. The setting of learning outcomes and the inclusion of summaries are an important part of this ongoing dialogue.

Table 3: Examples of dialogue in DE materials

Dialogue in DE materials		
Function	Classroom talk	DE dialogue
Indicating what the learner should be able to do <i>before</i> tackling a particular project	'Go on to Chapter 6 of the book, but only if you've finished the work I set last week....'	Before starting this unit, you need to be able to ... Complete the following activity which revises the work you need to know before ...

Dialogue in DE materials		
Function	Classroom talk	DE dialogue
Stating what should be learned from a particular section	'This section deals with vertebrates. When you've finished it you should be able to list four main characteristics...'	By the end of this unit, you should be able to: discuss the use of dialogue in DE course materials ...
Practising so that the learners can see whether or not they have successfully achieved the outcomes	'OK. Now answer the questions on the sheet I've given you...'	This activity should help you to ... Answer each of the questions in the spaces provided ... Suggested answers can be found on page
Feedback on the learner's performance	'I'll hand back the essays you did last week ...'	In answering the question you may have thought of the following points ... This assignment was well done and I like ... but you could have....
Motivation and stimulation	'It's tough going but it's worth struggling over, and it gets easier later on ...'	If you disagree strongly with the commentaries, you can contact your tutor on ... Do not worry if you still feel a bit uncomfortable with this idea, we will be exploring it again from a different point of view in Unit 5 ...
Unpacking the often difficult language of the textbook so that it makes sense to the student	'What it means is this ...'	We must write in such a way that the material always makes sense to the learner ... Another way of thinking of this could be to ...
Relating concepts to the learner's experience...	'You know when you cut your finger ...'	In the space below, describe a lesson you taught recently which went particularly well. What preparations on your part do you think contributed to the success of the lesson?

Hilton Hubbard of the Linguistics Department of UNISA (in Mays 2004), neatly summarises and illustrates recommended language practice in the guidelines that follow.

- Prefer short words (use) to long ones (utilise);
- Prefer familiar words (give) to more exotic ones (render);
- Prefer concrete words with metaphorical potential (bloom, soup) to abstract ones (effloresce, substance);

- Prefer verb-giving verbs (try, simulate) to needless nominalisations (attempts have been made, provide a simulation of);
- Prefer actives (chemists have tried) to passives (attempts have been made by chemists);
- Prefer shorter sentences to longer ones, avoiding in particular complex sentences with centre-embedding (water, carbon dioxide, methane and ammonia, [which are all simple compounds, [known to be present on at least some of the other planets in our solar system,]] are among the plausible possibilities);
- Prefer affirmative sentences (... and is probably close to the truth) to negative ones (... cannot be too far from the truth);
- Prefer a fairly personal style (I shall give, we do not know) to an impersonal one (the account given here);
- Avoid vague or ambiguous pronoun reference (Because, by definition, it could not be observed, the account of the origin of life given here is necessarily speculative);
- Provide adequate connecting links between clauses and sentences (in particular, so) especially where the meaning relation between the sentences is discontinuative (but);
- Abide by the given-new contract (cf. the positioning of a number of rival theories and after a few weeks of this).

In the slides below, we summarise some key indicators for good writing.

The Writing

- Write Clearly . Use familiar words more
- Writing has to be clear and use more familiar words , for e.g.
- Less familiar word More familiar word
- Facilitate Help
- Attenuate Ease
- Detrimental Harmful
- Influx Arrival

Sentences

- Use short sentences in preference to long, but not at the expense of cohesion
- Do not use unnecessary words and phrases
- Highlight the key points
- Write in a logical order

Prefer the positive to the negative

- | | |
|---|---|
| <ul style="list-style-type: none"> • Negative version • It is not a good idea to ignore the warning signs • The expert witness did not contradict what the accused said | <ul style="list-style-type: none"> • Positive version • Pay attention to the warning signs • The expert witness supported what the witness said |
|---|---|

Give specific and concrete instances

- | | |
|--|--|
| <ul style="list-style-type: none"> • General/vague • Write a short answer • Many people • Very fast | <ul style="list-style-type: none"> • Specific/precise • Write about 300 words • Around 65% of adults • Over 150 Km/hr |
|--|--|

Questions

- Provide in-text questions
- Provide feedback for self-assessment
- Put in variety of questions: mainly objective and short answer
- Questions should be based on the preceding section/sub-sections
- Feedback in the form of answers or hints should be provided

Layout and accessibility

Effective layout of printed materials maintains a creative tension between consistency and variety. It is important that learners are able to find their way through the various units and sections by the provision of contents pages, concept maps, headings, subheadings, statements of aims and learning outcomes, and other access devices. The text also needs to be broken up into reasonable chunks, and the layout should assist the logical flow of ideas.

At the same time, a very predictable format can lead to boredom. A good way of introducing variety is through the use of visual material such as concept maps, pictures and diagrams. This has the added advantage of catering for learners who learn best through visual representations of ideas. Where appropriate concept maps, pictures and diagrams should be included.

Where the course is presented through another medium, or where other media are used to support printed course materials, similar issues of accessibility need to be applied to the other media employed. The medium chosen, and the way it is used, should be appropriate for the intended learning outcomes and target audience.

Activities feedback and assessment

A major strategy for effective teaching in course materials is the provision of a range of activities and strategies to encourage learners to engage with the content. If the course designer provides feedback or commentary on these activities, then learners will experience a form of the discussion that takes place in lively classrooms.

Furthermore, because learners work through the materials largely on their own, they need some means of assessing their own progress. Comments on the activities in the materials can help to do this. The assessment criteria for the programme as a whole should be made clear to learners and should be appropriate to the intended learning outcomes.

Detailed criteria

Orientation to programme, introductions, aims & learning outcomes

- 1.0 Introductions to programmes/modules/units/sections
 - 1.1 Explain the importance of the topic for the learner and create interest in the material
 - 1.2 Provide an overview of what is to come
 - 1.3 Forge links with what the learners already know and what they are expected to learn
 - 1.4 Point out links with other lessons/sections
 - 1.5 Provide some indication of intended learning outcomes in ways that are directly relevant and useful to the learners
 - 1.6 Give indications of how long the learner should spend on the material in the lesson so that the learners can pace themselves.
- 2.0 Learning outcomes
 - 2.1 Are stated clearly and unambiguously
 - 2.2 Describe what the learners need to demonstrate in order to show their competence
 - 2.3 Are consistent with the aims of the course and programme
 - 2.4 The content and teaching approach support learners in achieving the learning outcomes

Selection and coherence of content

3.0 Selection of content

- 3.1 Content is contemporary and reflects current thinking and recent references
- 3.2 Content is appropriate both to the intended outcomes of the programme as well as recognising prior learning
- 3.3 **Content builds on learners' experience where possible**
- 3.4 There is appropriate variety in the selection of content.

Presentation of content

4.0 Presentation of content

- 4.1 Concepts are developed logically
- 4.2 Concepts are explained clearly using sufficient and relevant examples
- 4.3 **New concepts are introduced by linking to learners' existing knowledge**
- 4.4 Ideas are presented in manageable chunks
- 4.5 A variety of methods are used to present the content and succeed in keeping the **learners' interest alive**
- 4.6 Theories are not presented as absolute – debate is encouraged
- 4.7 The course materials model the processes and skills that the learners are required to master – i.e. they practise what they preach.

View of knowledge and use of learners' experience

5.0 View of knowledge and RPL

- 5.1 **Learners' own experiences and understanding are seen as valid departure points for discussion**
- 5.2 Knowledge is presented as changing and debatable rather than as fixed and not to be questioned
- 5.3 Learners are encouraged to weigh ideas against their own knowledge and experience and to question ideas/concepts that do not seem to be adequately substantiated
- 5.4 Learners are helped to contextualise new knowledge appropriately and a concerted effort is made to empower learners to use theory to inform practice.

Activities, feedback and assessment

6.0 Activities

- 6.1 The activities are clearly signposted and learners know where each begins and ends
- 6.2 Clear instructions help the learners to know exactly what they are expected to do.
- 6.3 The activities are related to the learning outcomes.
- 6.4 Activities reflect effective learning processes
- 6.5 Activities are sufficient to give learners enough practice
- 6.6 Activities are distributed at fairly frequent intervals throughout a section
- 6.7 Activities show a range of difficulty
- 6.8 Activities are sufficiently varied in terms of task and purpose
- 6.9 Activities are life/work related
- 6.10 Activities are realistic in terms of time indications and resources available to learners.

- 7.0 Feedback to learners
 - 7.1 Feedback to learners is clearly indicated
 - 7.2 Feedback is offered in the form of suggestions and is only prescriptive where necessary
 - 7.3 The learners are able to identify the errors they have made, and they are able to assess their progress from their responses
 - 7.4 Where calculations are required, the stages in the working are displayed and explained.

- 8.0 Assessment
 - 8.1 There is an assessment strategy for the course as a whole
 - 8.2 The assessment tasks are directly related to the learning outcomes
 - 8.3 Formative and summative assessment strategies are employed
 - 8.4 Assessment criteria are made known to learners and feedback is provided on interim assessments which helps learners to improve
 - 8.5 Mechanisms exist for learners to respond to feedback on assessment and these are clearly explained in the courseware.

Language

- 9.0 Language level
 - 9.1 New concepts and terms are explained simply and these explanations are indicated clearly in the text
 - 9.2 The language used is friendly, informal and welcoming
 - 9.3 Learners are not patronised or **'talked down to'**
 - 9.4 The discourse is appropriate to the learning intended
 - 9.5 The language is sensitive as far as gender and culture are concerned
 - 9.6 The language takes cognisance of the multilingual reality of South Africa
 - 9.7 The language is active and sufficiently interactive

Layout and accessibility

- 10.0 Learning skills
 - 10.1 Summaries and revision exercises are included at frequent intervals to assist the learners to learn
 - 10.2 Skills for learning (such as reading, writing, analysing, planning, managing time, evaluation of own learning needs and progress) are appropriate to the outcomes of the course and integrated into the materials

- 11.0 Access devices (in texts; corresponding features will be looked for in other materials, e.g. videos)
 - 11.1 The numbering/headings system makes it easy for learners to find their way through the text
 - 11.2 The text is broken up into reasonable units
 - 11.3 Headings and sub-headings are used to draw attention to the key points of the lesson. This makes it easy for the learners to get an overview of the lesson at a glance. It also makes it easy to find parts the learners want to refer to.
 - 11.4 There is a contents page
 - 11.5 Pre-tests are used wherever feasible to help the learners know what skills or knowledge they need to have before starting the lesson/section

- 11.6 Links with previous knowledge and experience, with other parts of the same lesson and with other lessons are indicated.
- 12.0 Visual aids (pictures, photographs, diagrams and cartoons) (in texts)
- 12.1 The visual aids used complement the written text
 - 12.2 Line pictures, cartoons are well-drawn and appropriate for target learners. They are gender and culture sensitive.
 - 12.3 Where appropriate, concept maps and diagrams are included to help the learners to get an overview of the material and to assist the learning process.
 - 12.4 Captions and explanations accompanying visual aids are adequate and give the learners a clear idea of what their purpose is.
 - 12.5 Instructions/explanations accompanying diagrams are clear and learners know what they are expected to do.
 - 12.6 Visual aids are well placed in the text.
 - 12.7 Visual aids are of suitable size.
 - 12.8 Where printed materials are supported by other media, use of the other media is clearly indicated in the materials and appropriate for the intended learning outcomes.

Summing up:

Characteristics of Self-learning materials

- **Can be compared with an effective teacher in the classroom situation who motivates learners, explains concepts and provides all the possible guidance and direction in their studies.**
- **The study material should make the learner active and responsive.**
- **Learning activities should open up a genuine interaction between the learner and the content.**
- **Good distance teaching material will contain numerous activities, (as many as a distance teacher can visualize and create) so that the student is perpetually stimulated to learn.**

Appendix 2 contains an extract from some distance learning materials that we feel illustrates many of the criteria outlined above. Note in particular the ways in which initial questions lead into an introductory activity and how feedback on each activity links in to the next part of the discussion. Notice how **each activity takes the concept of a 'community' to a higher level of sophistication.**

Appendix 3 then contains a continuous extract from a print-based distance learning text, showing the interplay between activities and content, text and graphics, theory and practice.

Appendix 4 contains an adapted extract from a school management programme which illustrates the unit structure proposed in Figure 17. Appendix 5 then shows what the same basic design structure might look like in a digital environment such as moodle (for which it is possible to have both online and offline versions of courses).

One way to ensure that all materials development teams incorporate all agreed design features is to have them work within a pre-designed template. The following link provides an example of materials developed for teaching mathematics at a primary school level. The materials were developed within a template designed by and freely available from the Commonwealth of Learning (www.col.org):

<http://www.oerafrica.org/acemaths/ACEMathsProjectHome/tabid/132/Default.aspx> .

Perhaps, the most important characteristic of distance learning resources that distinguishes them from traditional textbook type resources is the integration of activities to guide students towards a deeper engagement with the content.

We will therefore now proceed into a more in-depth discussion about learning activities and feedback and some of the ways in which ICT can facilitate activity-based learning.

Learning activities and feedback

In the final section of this manual we provide some more detailed guidelines regarding the design and inclusion of learning activities and feedback thereon.

We will discuss this issue under four main headings:

- Variety
- General structure
- Purpose (looking towards elearning/online learning in particular)
- Feedback.

Variety

There is a tendency to include in distance learning materials, activities that are written and summative only. However, to support distance learners more effectively, we need to make provision for a wider range of activities.

It is often useful to begin by thinking about how we would teach a particular concept in a classroom setting as illustrated in Table 4 below.

Table 4: *Classroom possibilities ...* (Adapted from: Carl 2009:96)

Lecture	Discussion	Group work	Self-activity
<ul style="list-style-type: none"> • Class lecture • Speech • Paper • Story • Demonstration • Symposium • Panel 	<ul style="list-style-type: none"> • Free group discussion • Controlled class discussion • Forum 	<ul style="list-style-type: none"> • Horseshoe groups • Round-table groups • Syndicates • Buzz groups • Brainstorming • Nominal group method • Fishbowl 	<ul style="list-style-type: none"> • Play • Project work • Activity cards • Learning contracts • Self-study models • Programmed learning • Teaching machines
Experiential learning			
<ul style="list-style-type: none"> • Simulation • Dramatisation • Role play • Socio-drama • Case studies • Advanced learning programme • Laboratory learning • Sensitivity training 			

As indicated in the above table, there are a number of different strategies that we can use and model in contact sessions and workshops.

Just as we use different activity approaches to suit different learning purposes in the classroom, and to keep pupils engaged and interested, so we need to vary the ways in which we present activities in distance learning resources.

It is useful to begin by thinking about activities for the introductory phase such as building an activity around a case study, a cartoon or a video.

Then activities in the development phase might involve more complex multi-step processes such as trialling an activity in the classroom, capturing evidence in the form of photographs, audio or video files on a cell phone; discussing this with colleagues at the school; and then preparing a presentation for the a Sunday study centre discussion.

In the concluding/consolidation phase of a unit of study, we might consider activities such as summarising in the form of a table or mindmap or creating a diagram.

General structure

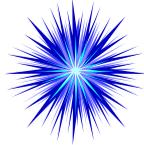
In this section we provide some guidelines towards planning and structuring learning activities generally.

Planning/writing checklist

This checklist will remind you of the different aspects which require your attention.

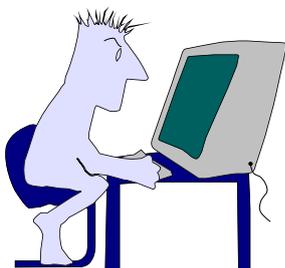
		1
Planning:	<ul style="list-style-type: none">• Make sure that you work within your module outline.• Brainstorm activities for a selected section/unit of a module.• Select one or two promising activities.• Answer questions in preparation for writing the learning activity• Use the activity format to plan the activity/activities.	
Writing:	<ul style="list-style-type: none">• Start writing draft one according to the activity format.• Discuss first draft, evaluate, revise.• Complete 'presentation' draft.	
Production	<ul style="list-style-type: none">• Plan the layout of your activity/activities.• Use scissors, glue, pastel coloured paper to do the layout of your activity/activities.	

How to brainstorm activities for a selected section/unit of the module



1. Use an imaginative teaching approach.
2. Look at examples of activities in other modules.
3. Brainstorm different activities which could be used for this particular section/unit.
4. Select one or two which look promising.
5. For each one selected specify what you intend to do (your aim) and what the student will be expected to do (his/her outcome).

After the initial preparation and brainstorming, you are ready to start planning and writing your learning activity.



Questions to guide the planning of the learning activity

Preparing to write

Select the most appropriate activity and prepare yourself for planning the learning activity by answering the following questions. Write your responses in the spaces below:

1. What is the main aim of the module into which the activity could fit?
2. What are the learning outcomes of the activity (What will be learner be expected to do?) How will the outcome/s contribute to learning outcomes of the unit/section ?
3. How does the activity fit into the overall teaching? What precedes it and what will it lead on to?
4. What is the purpose of this activity?
5. What difficulties could the learners have with this activity? (anticipate problems)
6. What will you include in the feedback?
 - How will you cater for different learners?
 - Can you predict possible answers that learners may produce?
 - What else can you do to enable learners to evaluate their responses?The feedback comments should encourage learners to learn.
7. Where will you present your feedback to learners? Justify your decision.

Activity format specification sheet

Key elements to be included when writing activities

- **SUBHEADING**

- **CONTEXT**

How does the activity fit in with what has been done before?

- **RATIONALE**

Why should the learner do the activity?

- **ICON**

- **TIME**

Spend about minutes

- **INSTRUCTION**

The learner must know exactly what to do. Give an example of the type of response you expect.

- **FEEDBACK**

The feedback comments should encourage learners to learn. Predict possible answers learners may produce. Reflect on difficulties learners may experience.

(Adapted from an activity format specification sheet by Fred Lockwood)

Purpose

Of course we do not put learning activities into distance learning resources just for the sake of keeping students busy! Each activity needs to have a purpose and sometimes more than one purpose, for example an activity might require students to engage with content but to do so in ways that also require practice of their emerging ICT skills, as in the following examples prepared for OER Africa by Christina Randell.

A major strategy for effective teaching and learning in course materials and in an online learning environment is the provision of a range of activities and strategies to encourage learners to engage with the content and acquire the knowledge, skills and values linked to the course outcomes.

What are good learning activities?

Good learning activities motivate and engage the learner to attain an acceptable level of success in achieving the learning outcomes specified in the course. The following criteria and guidelines are drawn from different ¹sources. They are integrated to provide an overview of the main elements constituting good learning activities.

Purpose of activities

The purpose and nature of a course determines the level, type and spread of learning activities. By analysing the course outcomes you can determine the right mix of activities.

- } Relate to course level outcomes and content (e.g. Bloom's Taxonomy)
- } Relate to the type of knowledge, skills and values that need to be acquired.
- } Provide learners with clear expectations and criteria.

Promote learning

The aim of any learning activity is to motivate learners to become actively involved in interrogating concepts and content to develop their own understanding and acquire or strengthen identified skills. Activities are not haphazardly thrown into the content but are carefully designed and integrated to create a focused and engaging learning pathway.

- } Activities are informed by and reflect appropriate learning processes and strategies e.g. Kolb's Learning Cycle, Constructivist Learning Theory
- } The number of activities adequately covers the course outcomes and content
- } Activities are sufficient to give learners enough practice
- } Activities are distributed at fairly frequent intervals throughout a section
- } Activities are sufficiently varied in terms of task and purpose
- } Activities are life/work related
- } Activities show a range of difficulty. Initial activities should be less complex with more complex tasks assigned to students as the course progresses
- } Activities are realistic in terms of time indications
- } Activities motivate and engage the learners.

¹ Saide Criteria for Quality Course Materials, 2002

Nadeosa Quality Criteria for Course Materials, Welch and Reed, 2005

- } Learners have convenient access to up to date Internet connected computers that have the hardware and software necessary for ease of operation in the online environment.
- } Technical support is accessible to learners
- } The online learning management system allows opportunities for learners to interact with the facilitator or tutor and fellow learners.
- } Adequate orientation and support is provided to enable learners to become skilled in operating in the online learning space.
- } There are effective tracking and feedback mechanisms to and from learners to enable them to check their own progress.

Structure and layout of activities

A well designed structure and layout consistently threaded through the unit or module of the course signals to learners when they are expected to become actively involved. A predictable but not inflexible structure is like a learning thread or pathway through the learning materials whether in print or online.

- } All activities are clearly structured:
 - o Short motivational introduction (WHY is this activity important and worth doing)
 - o Clear description of task and instructions (WHAT do you have to do)
 - o Guidelines (HOW can you approach this task)
 - o Time allocated
 - o Feedback (Comments to enable students to track their progress and additional information to strengthen learning)
- } Activities are clearly stated and All deadlines for completion of activities should be clearly stated upfront.
- } The activities are clearly signposted and learners know where each begins and ends
- } The signposting of activities is consistently followed through in each unit and module of the course.

Types of activities

We can cluster learning activities into 3 broad categories: activities building comprehension, activities building critical thinking and activities building skill. The three groups of activities as shown in the table below must be viewed as interrelated as they serve to develop competence. We understand competence to mean: the knowledge, skills, values and attitudes required to perform at an acceptable standard.

Table 5: Activity types and offline and online possibilities

Activities building comprehension	Activities building critical thinking	Activities building skill
Computer marked quizzes <ul style="list-style-type: none"> • Short answers • True/False or Yes/No • Multiple choice 	Online research	Simulations, role plays (online)
Video reflections	Case studies	Demonstration and practice
Webquests	Problem based learning	Games
Matching and sequencing Drag and drop	Decision making trees	Projects

Activities building comprehension	Activities building critical thinking	Activities building skill
Cloze Label and identify diagrams Scavenger hunts	Webquests	Peer to peer collaboration and communication <ul style="list-style-type: none"> • Chat sessions • Blogs • Forum discussions • Emails E-portfolios Student presentations
Activities are interrelated and serve to build competence comprising knowledge, skill, values and attitudes that enable students to perform at a specified standard		

The following examples serve to illustrate the use of selected learning activities from the above list. They are drawn from units, modules and courses found on OER websites. The activities can be reused, adapted, remixed according to specified CC licences.

Activities building comprehension

1. Computer marked quiz

What is it?

Computer marked quizzes include different types of question options: multiple choice, True or False, Yes or No, selection of options from a drop down menu, text or numerical questions that require students to enter a short text or number. The quiz can comprise a set list of questions or a database of questions developed by the educator/facilitator and marked by the computer. The database allows for random selection of questions per quiz attempt which makes it possible for students to redo the quiz several times. Immediate feedback is built in to enable learners to check their progress.

Why use it?

Computer marked quizzes provide objective testing and offer students immediate feedback. The quizzes are interactive and allow learners to continuously check their understanding of what they are learning. Quizzes can be used:

- to introduce a topic or unit
- **to create the learners' awareness of their entry level knowledge**
- for formative or summative assessment. Quizzes usually form part of a broader assessment strategy.

Example 1: Simple quiz for use to start topic or unit

Description of activity	Name of unit/module/course and website	CC licence
This Copyright Taster Quiz is offered at the start of the Copyright unit and immediately gets the student involved in engaging with the introduction to Copyright.	Unit: Copyright: Your educational right to copy Open Content Licensing 4 Educators	CC-BY

The quiz uses True and False statement options. Feedback is provided for both True and False answers and students are encouraged to read both comments.	Workshop on the WikiEducator website http://wikieducator.org/Copyright_for_Educators/Introduction	
---	---	--

Example 2: Complex quiz for multiple uses

Description of activity	Name of unit module/course and website	CC licence
<p>The Good academic practices quiz is offered at two levels:</p> <ul style="list-style-type: none"> • Introductory level • Advanced level <p>This allows for learners of different entry levels to engage with the module.</p> <p>Students are encouraged to try the quiz at the start of the module to test their entry awareness of good academic practices.</p> <p>Students can try the quiz at the end of each section of the module as well as at the end to check their progressive understanding of academic practices.</p> <p>A variety of question options are used and effective use is made of supportive feedback that strengthens insight and comprehension and is motivating.</p>	<p>Unit: Developing Good Academic practices (DGAP_1) Introductory level</p> <p>OpenLearn, Open University UK http://openlearn.open.ac.uk/mod/oucontent/view.php?id=399993&direct=1</p> <p>Unit outcomes This resource will provide:</p> <ul style="list-style-type: none"> • explanations about good academic practice and how to build it into your studies; • advice on how to avoid inappropriate or bad academic practice; • techniques on how to avoid plagiarism; • a quiz to test your understanding of good academic practice and your ability to avoid plagiarism. 	CC-BY NC SA

2. Video reflections

What is it?

Video reflections provide factual information visually about concepts and topics. The presentations are usually short and provide imaginative insights into difficult concepts and topics. A variety of images can be used as deemed appropriate, e.g. simple graphics, still photographs, diagrams, animations, moving pictures and interactive graphics.

Why use it?

Video reflections can be inserted at any point in a unit where they fit best. Suitable questions are linked to the video and learners are alerted to the questions in advance. Learners can share their thoughts on the video with their peers through blogs and microblogs. Video reflections can:

- capture the interest of learners
- clarify difficult concepts
- stimulate reflection on a new or known topic
- encourage sharing of ideas on a particular topic.

Example 1: Video to introduce a topic

Description of activity	Name of unit/module/course and website	OER licence

<p>Video 1: Building on the past to shape the future This is a short video clip used to introduce Creative Commons Licences. Participants are asked to answer two questions after viewing the video:</p> <ul style="list-style-type: none"> • What was the most important message of the video for you? • Did you learn anything new? <p>Learners post their thoughts in a microblog, e.g. twitter or Wenote.</p>	<p>Unit: Creative Commons Unplugged</p> <p>Open Content Licensing 4 Educators Workshop on the WikiEducator website</p> <p>http://moodle.wikieducator.org/mod/page/view.php?id=257</p> <p>Unit outcomes</p> <ul style="list-style-type: none"> • Introduce the free legal tools provided by Creative Commons which educators can use to refine their copyright. • Explain how Creative Commons licenses work and introduce the six licenses • Learn about the compatibility among the different licenses • Share thoughts and experiences with fellow participants via WENotes, identi.ca or Twitter. 	<p>CC-BY</p>
---	--	--------------

Example 2: Video to reflect on and consolidate new knowledge

Description of activity	Name of unit/module/course and website	OER licence
<p>Video: Wanna work together? This video follows on from Video 1 and is used to reflect on the basics of Creative Commons licenses. After viewing the video participants are asked to share what they have learned by posting a microblog.</p>	<p>Unit: Creative Commons Unplugged</p> <p>Open Content Licensing 4 Educators Workshop on the WikiEducator website</p> <p>http://moodle.wikieducator.org/mod/page/view.php?id=257</p>	<p>CC-BY</p>

3. Webquest

What is it?

The task is the central focus of a webquest. It requires that learners find information on the web for a particular purpose.

Why use it?

Webquests encourage learners to gather information from the web to enable them to complete a specific task. Webquests can be used in different ways. For example:

- Browsing: Look for information on specified websites in order to become familiar with the information on offer

- Solving puzzles or problems: Look for information from diverse sources in order to solve a puzzle or problem
- Reporting task: Look for information about a specific topic from different sources and compile it into an integrated account or report

Example 1: Browse specific websites to gather information

Description of activity	Name of unit/module/course and website	OER licence
<p>Activity 4: What is available for me to use? In this activity learners are required to browse specific OER repositories to look for “bits and pieces” they could use, adapt and mix when creating a set of OER online learning resources. They can create a useful reference list of OER resources for future use. Learners are advised to look at and record the the CC licences as they will determine how the resources can be used. The repositories listed in the activity are:</p> <p>Music ccMixer</p> <p>Multi-media resources across a range of topics Merlot</p> <p>Images Flickr</p> <p>A wiki of general repositories hosted by UNESCO UNESCO Open Educational Resources</p> <p>Jorum - a sharing site for Higher Education in the UK Jorum</p> <p>OER Commons This site has a range of open resources OER Commons</p> <p>Science Science Repositories</p> <p>Humanities Humanities Repositories</p>	<p>Unit: Creating Open Educational Resources_OER 1 Intermediate level</p> <p>OpenLearn, Open University http://openlearn.open.ac.uk/mod/oucontent/view.php?id=397777&section=4.1</p> <p>Unit outcomes After studying this unit you will:</p> <ul style="list-style-type: none"> • be able to state your own motivation for producing self-study Open Educational Resources (OERs); • have investigated and analysed some of the research into online learning; • have evaluated some examples of educational resources for active open learning; • be able to plan a structured learning experience using a range of resources; • be able to construct an Open Learn-style unit by remixing resources; • have considered how to evaluate your teaching resource 	<p>CC-BY NC SA</p>

Activities building critical thinking

4. Case studies

What is it?

Online case studies are stories or scenarios that reflect a range of authentic contexts. Appropriate technology can be used to present case studies, such as graphics, video and audio clips, multimedia interactions.

Why use it?

Case studies create a link with reality and can be used at any point in a unit. They can:

- capture the interest of learners and enable them to get an insight into a present or past reality
- clarify difficult concepts
- stimulate critical thinking, problem solving and evaluation
- prompt research
- stimulate analysis of a situation from a variety of viewpoints or perspectives.

Example 1: Printed case study to stimulate critical reflection

Description of activity	Name of unit/module/course and website	OER licence
<p>Activity 5: Learning from a story (Case study 1)</p> <p>This story operates at two levels. It is both a personal story and an historical account of child-care policy and practice in the last century, from someone on the receiving end.</p> <p>The first task is to note reactions to the personal story in the Learning Journal. The learning journal can be accessed on line and comments can be typed into the specified space.</p> <p>The second task is to note in the learning journal the main features of the child migration scheme indicating own thoughts on what the story reveals about the attitudes to children that prevailed at the time.</p> <p>Feedback can be accessed by clicking on the Reveal Discussion button.</p>	<p>Introducing Social Work Practice K113_1 Introductory level</p> <p>OpenLearn, Open University UK</p> <p>http://openlearn.open.ac.uk/mod/oucontent/view.php?id=398072&section=3.3</p> <p>Unit outcomes</p> <ul style="list-style-type: none"> • develop awareness of the underpinning knowledge relating to the key roles of social work; • illustrate the application of knowledge, skills, values and processes through case study examples; • demonstrate awareness of the skills required to build relationships with service users, colleagues and others through effective communication; • introduce the social work service standards and codes of practice relevant to each nation in the UK. 	CC-BY NC SA

Example 2: Audio case study to stimulate critical reflection

Description of activity	Name of unit/module/course and website	OER licence
<p>Activity 3: Biographical perspective using pathways (Audio clip 1: John)</p> <p>This is one of 4 audio clips of interviews with 4 homeless people. The audio clips give a brief insight into life without a home. They demonstrate the importance of a biographical perspective in understanding the unique and diverse needs of individual homeless people.</p> <p>The tasks involve:</p>	<p>Unit: Homelessness and need K202_3 Intermediate level</p> <p>OpenLearn, Open University UK</p> <p>Unit outcomes</p> <ul style="list-style-type: none"> • understand how some of the needs of homeless people can be met. 	CC-BY NC SA

<ul style="list-style-type: none"> • reading the background information about the individual • listening to the audio clip in which the person talks about his situation. A transcript of the audio clip can be accessed by clicking on View document • identify the needs of the person and make notes • make notes about who should be responsible for meeting the needs of the person <p>A commentary on the audio clips can be accessed in Section 8.</p>		
---	--	--

Activities building skills

5. Demonstration and practice

What is it?

An online multimedia demonstration of a process or system that shows its component parts and provides guidance on the steps that need to be followed. Structured practice activities are usually linked to the demonstration and give learners the opportunity to practise the requisite skills.

Why use it?

Online demonstrations are appropriate options when it is difficult to show a process in any other way or when supporting learners to carry out a set of actions to achieve a specified outcome. Online demonstrations have a number of helpful features, e.g. inclusion of audio and video elements, use of animations, allowing multiple viewing and permitting the learner to control the pace and progress.

Example 1: Video demonstration and practice activities

Description of activity	Name of unit/module/course and website	OER licence
<p>Web searching demonstration videos and practice activities:</p> <ul style="list-style-type: none"> • Search preparation activity. Learners download a template into which they can type their responses. • Video introduction to search strategies • Online activity to practise using keywords to search for information <p>This is a short sample. There are other online web search activities included in the tutorial, e.g. boolean search, title search, domain search, URL search, file format search</p> <p>The online activities are inserted into the learning text and learners are able to practice the search skills immediately after each video demonstration.</p>	<p>Tutorial: Web searching</p> <p>VUMA Skills Zone. A set of online tutorials designed to provide university students with opportunities to practice critical skills in key areas: Language, Number, Computer, Study and Social/Personal.</p> <p>SAIDE, OER Africa</p> <p>http://www.vuma.ac.za/skillszone/mod/lesson/view.php?id=129&pageid=740</p>	<p>CC-unclear</p>

6. Skills practice

What is it?

A skills practice activity is a learning activity that focuses on building and supporting practical performance. Learning a skill is a continuous and dynamic process and requires a range of skills practice activities: from simple to more complex and challenging. Feedback plays a vital role in the acquisition of skills.

Why use it?

Skills practice activities can be used at different intervals of the skills acquisition process: basic skills practice activities at the beginning with intermediate and more advanced follow up skills practice activities.

Example 1: Skills practice activity

Description of activity	Name of unit/module/course and website	OER licence
<p>Activity 3 Writing a longer summary This is a practical activity that requires learners to compare two summary versions of an original text about HIV/AIDS.</p> <p>Learners identify the version they think best uses the 5R's (reduce, reject, reword, reproduce, repackage) and summary organization.</p> <p>They can type their reasons for selecting the best summary inside a typing block included in the highlighted activity space.</p> <p>They can click on save and reveal answer. The feedback appears and learners can compare their answer with the one provided.</p>	<p>Unit: Summarising text L185_3 Introductory</p> <p>OpenLearn Open University</p> <p>http://openlearn.open.ac.uk/mod/oucontent/view.php?id=401419&section=2</p> <p>Unit outcomes</p> <ul style="list-style-type: none">• understand what a summary is: 'the 5Rs'• recognise a successful summary• practise turning notes into a summary.• identi.ca or Twitter.	CC-BY NC SA

7. Games

What is it?

Games are interactive activities that can enhance and strengthen learning. A range of games can be used in the online learning environment, from simple practice games to more complex, challenging and competitive games. Games require learners to be actively engaged in a variety of ways: they can follow simple rules to achieve a result; they can participate in online role plays to gain an insight into different perspectives; they can engage in a simulated environment where they are required to analyse problems and find solutions. Participation is central to all games.

Why use it?

Online games can provide a stimulating multi-media learning space. Games can use visual representation, animation, drama, humour, simulated contexts to create a compelling learning experience. Games are by their very nature action oriented and can encourage participation at different levels. Post-game reflections can be used to encourage sharing among learners and to

deepen the learner's learning experience. The challenge is to select appropriate and enjoyable games that will encourage longer attention spans and result in a positive learning experience. '

Example 1: Test and consolidate new knowledge

Description of activity	Name of unit/module/course and website	OER licence
<p>Remix game The game challenges the player to consider a number of remix scenarios to explore license compatibility.</p> <p>Purpose Test knowledge about remix of Creative Commons Licences</p> <p>How it works Six examples are presented. For each example the dealer deals four cards, each representing an open educational resource (OER). Each card has an icon representing its media type: Text, Image, Audio, and Movie. Each card also shows the license mark of the original resource. The work's license may be CC BY, CC BY-SA, CC BY-NC-SA, or GFDL, or considered public domain.</p> <p>The intention is to determine which of the four OER's shown on the cards can easily be remixed into a derivative work and which not.</p>	<p>Unit: Creative Commons Unplugged</p> <p>Open Content Licensing 4 Educators Workshop on the WikiEducator website</p> <p>http://moodle.wikieducator.org/mod/page/view.php?id=257</p> <p>Unit outcomes</p> <ul style="list-style-type: none"> • Introduce the free legal tools provided by Creative Commons which educators can use to refine their copyright. • Explain how Creative Commons licenses work and introduce the six licenses • Learn about the compatibility among the different licenses • Share thoughts and experiences with fellow participants via WENotes, identi.ca or Twitter. 	<p>CC-BY</p>

Feedback

Traditionally, distance education provision has been characterised by print-based materials and possibly some contact support. Increasingly, however, both distance and contact providers are making growing use of e- and on-line learning approaches. Connected students have access to information on almost anything 24/7 and so the role of the teacher shifts from that of being a primary provider of content to rather being a guide in pointing students to useful sources of credible information and suggesting activities that will help them to make meaning and create new understandings. Laurillard (2002; 2006) has observed that although they use different terms, educational theorists for the past 100 years or so have consistently argued that deep, meaningful learning requires active student engagement but that teachers have been slow to implement this advice. Active student engagement includes interactions between students and content, students and other students, students and faculty and, when appropriate, students and workplaces and/or communities. These kinds of interactions are illustrated in the following diagram.

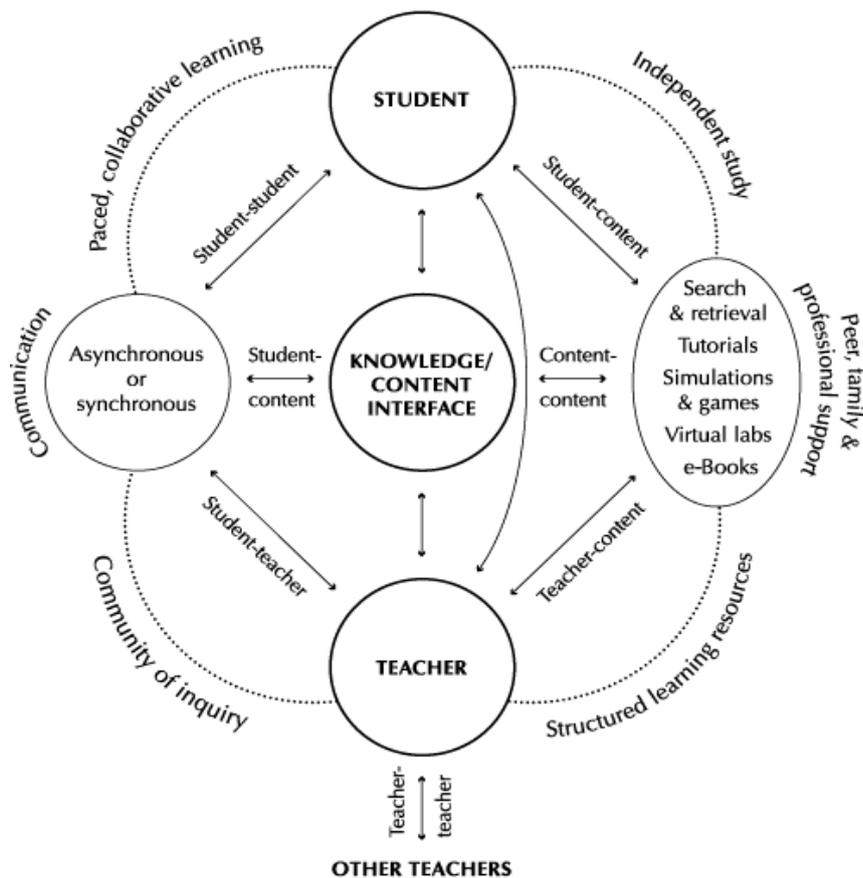


Fig 18: A model for online learning (Anderson 2008:61)

A diverse range of ICTs are now available to enable this interaction but they need to be selected and utilised purposefully for this potential to be realised. In an insightful paper on emergent learning and the affordances of learning ecologies in Web 2.0, Williams, Karousou and Mackness (2011: 39) caution: ... although social networkin

g media increase the potential range and scope for emergent learning exponentially, considerable effort is required to ensure an effective balance between openness and constraint. It is possible to manage the relationship between prescriptive and emergent learning, both of which need to be part of an integrated learning ecology.

In many countries, experiences at the school level will have been largely characterised by teacher-led and content-driven approaches. Therefore, learning pathways need to be deliberately designed to gradually move the locus of power from teacher to learner through communities of learning, to help learners 'to move to mediated learning, without losing their ability to achieve situated learning' Kinross and McKenzie (2009), and from an emphasis on rote learning to one which foregrounds the process of reasoning, taking into account the learner's local context. So we need to be concerned not only with what supporting technologies are being used in teaching and learning and where, but also with how they are being used and whether there is a progression towards increasing student autonomy in making decisions about what, how, where and when to learn. Despite the opportunities that we provide for more open-ended engagement, the reality is that for some students, those who lurk on the periphery of our discussion fora for example, meaningful engagement with the individual student may only occur when they have to complete a compulsory

assignment and we have an opportunity to provide feedback. On-line teachers, even if working within a contact-mode institution, could therefore usefully learn from the experience of seasoned distance education practitioners.

Assessment in online distance education

Feedback is probably the most crucial way in which we can support our learners through their learning process. The way in which we provide feedback can have a dramatic influence on our **learners' confidence in the subject, and their motivation to continue persevering, especially if they are struggling.**

By following a few simple guidelines, we can give our learners the kind of feedback that boosts their confidence and helps them to overcome even the toughest of challenges. Constructive feedback is:

- Prompt, research shows that if learners receive feedback within 14 days of submitting an assignment, they are more likely to act on it than if they are made to wait longer.
- Specific, giving the learner a clear indication of where the strengths and weaknesses lie.
- Thoughtful, indicating that the tutor has put time and effort into trying to understand what the learner is saying.
- Related to the learning outcomes, and includes an explanation of how the grade/ mark was arrived at.
- **Also related to the learner's assignment-writing skills**, and gives advice on study skills where appropriate.
- Related to the course material, so that learners know where to look for further information if required.
- Focused on the most important improvements needed, rather than overwhelming learners with details about minor improvements that could be made.
- Written in plain, jargon-free language that learners will understand with ease.
- Fair.
- Honest – both in terms of its praise and its criticism.
- Supportive and encouraging – focusing on the work, not the learner.
- Personal, referring to the learner by name.

Source: Saide: SDL Unit 6 2012

We would hope that if students are struggling with the completing (or even starting) of an assessment task, they would feel able to make contact with a tutor or lecturer (and/or a fellow student) and find a solution. We should seek to avoid anybody dropping out of the programme because of a problem that could have been resolved through discussion. The kind of feedback we provide on their assignments, which as noted may be the only substantive interaction we have with the individual student, will be central to building this sense of openness and trust. Saide therefore recommends the following guidelines to evaluate how tutors or etutors mark student assignments.

Look for evidence of the following in assignments and assignment feedback:

Do the assignments and feedback help to:

1. Consolidate the learning?
2. Provide a progress check (for learners and tutors)?

3. Provide academic support (i.e. guidance on writing, editing, pacing themselves, accessing/using/acknowledging information ...)?
4. Motivate the learner (even if he/she has not done very well)?

Look at the comments made and try to find evidence of:

5. a system for giving feedback that is consistent across all the assignments and easy to understand
6. comments that demonstrate that the tutor has read the assignment and that establishes and maintains an empathetic/supportive dialogue
7. comments that indicate errors or simple misunderstandings with reference to course material, so that the learners can check and make their own corrections
8. comments about the relevance or appropriateness of the content and approach used by the learner in answering the assignment
9. comments which offer support and encouragement
10. comments on assignment writing skills and advice on study skills techniques and strategies
11. comments that explain the grade/mark they have been given
12. a general summative comment on the assignment at the beginning or end which indicates whether the intended outcomes were achieved, as well as specific comments next to relevant sections of the assignment itself
13. a consistent system for providing useful formative feedback on language issues relating to **meaning, coherence, cohesion, language of discourse/discipline, general accuracy ...** reference skills
14. comments which extend outstanding learners
15. a system for flagging at risk learners
16. efficient record keeping
17. provision of model answers
18. benchmarking (assessment criteria/ norm referencing?)
19. respect for adult learners

Look for a structure in the feedback such as the following:

- 20.1 Start with positive comments on the assignment, and build on the strengths of the assignment
- 20.2 Follow this with constructive criticism, giving examples of weaknesses and possible ways to overcome them.
- 20.3 End off with encouragement to motivate the learners

Saide: 1998

This might be a useful checklist for course/module/paper coordinators to use in moderating the marking of assignments. The development of detailed rubrics and memoranda at the time of compiling the assessment task can help us to provide online feedback that is comprehensive, consistent and time-efficient but which can also be modified to the individual. In summary, feedback on assignment tasks is seen to be a critical teaching for both traditional print-based distance as well as on-line learning provision. The integration of ICT opens up more functional possibilities for interaction with dispersed students. This is illustrated by the discussion in the final section of this manual.

Integrating media and technology

One of the outcomes of the Bihar State curriculum framework for teacher education refers to the need to integrate media and technology. The development of a network of ICT facilities linked by a common learning management system (LMS) such as Moodle, Sakai or Canvas will assist in transforming this from a policy principle into actual practice.

However, media and technology are merely tools offering a means to an end. We need to be clear about why we want to use particular media or technology at different times so that curriculum needs, driven by sound pedagogical principles, inform the decisions that we make.

The following two tables provide some guidelines in this regard.

Table 6: Media and technology integration decision-making guide (extrapolated from earlier work by Alan Bates)

Medium	Technologies for Delivery	Educational Applications
Face-to-face contact	<ul style="list-style-type: none"> Overhead projectors (manual or electronic) Specialist technologies All of the below 	<ul style="list-style-type: none"> Seminars, tutorials, classes, workshops, and lectures Learner study groups or self-help groups Conferences One-to-one interaction, either between educator and learner, learner and learner, or learner and mentor (especially in workplace) Drama-in-education or theatre-in-education sessions Practical demonstration and activities
Text (including graphics)	Print (or pdf e.g. digital textbooks)	<ul style="list-style-type: none"> Books, booklets, and pamphlets (either already published or written specifically for a course) Study guides, written either as stand-alone material or as 'wrap-around' guides to already published material

Medium	Technologies for Delivery	Educational Applications
		<ul style="list-style-type: none"> • Workbooks intended for use in conjunction with other media materials (for example, audio or video cassettes or computer-based learning) • Newspapers, journals, periodicals, newsletters, and magazines • Printed learner support materials (for example, self-tests, project guides, notes on accreditation requirements or other aspects of courses, bibliographies, and handwritten/typed materials or comments passing between learners and educators) • Maps, charts, photographs, and posters • Written/printed correspondence • Learner support material (for example self-tests, project guides, notes on accreditation requirements, or other aspects of courses, bibliographies, and materials or comments passed between learner and educator)
	Facsimile	<ul style="list-style-type: none"> • Written/printed correspondence • One-multi point distribution
	Mobile sms and increasingly also below ...	<ul style="list-style-type: none"> • Written/printed correspondence • One-multi point distribution • Possibility for limited 2-way communication

Medium	Technologies for Delivery	Educational Applications
	<p>Computers (including a range of applications such as e-mail, electronic databases, HTML documents, FTP or ASCII documents, CD-ROM, Flash)</p> <p>Networked smartboards</p> <p>Blogs</p> <p>Wikis</p> <p>Fora (discussion threads) (synchronous/asynchronous?)</p> <p>Chat rooms</p> <p>Social media e.g. Twitter, Facebook, IMM with RSS feeds</p> <p>...</p>	<ul style="list-style-type: none"> • Electronic publishing • Study guides, written either as stand-alone material or a wrap around guides to already published materials • Instructional material intended for use in conjunction with other technologies (for example audio or video cassettes or printed materials) • Newspapers, journals, periodicals, newsletters, and magazines • Learner support material (for example self-tests, project guides, notes on accreditation requirements, or other aspects of courses, bibliographies, and materials or comments passed between learner and educator)
Audio	Audio Cassettes	<ul style="list-style-type: none"> • Audio programmes (music, talk radio, documentary, literature review, lecture, panel discussion, news, current affairs, debate, drama etc)
	Audio Compact Disc/Flash	<ul style="list-style-type: none"> • Audio programmes as for above
	Radio broadcasts (national/community) and/or audio podcasts	<ul style="list-style-type: none"> • Radio programmes as above • Radio phone-ins, talk-back radio)
	Telephone (including mobile)	<ul style="list-style-type: none"> • Telephone tutoring • Information or enquiry service • Telephone conferences
	Computers with related applications (including CD-ROMs) increasingly mobile	<ul style="list-style-type: none"> • Multimedia sound (audio files) • Voice communication
Video	Television Broadcasting (terrestrial, satellite or cable, digital or analogue transmission, including narrowcast educational television and mobile)	<ul style="list-style-type: none"> • Video programmes (music, talk shows, documentary, literature review, lecture, panel discussion, news, current affairs, debates, game shows, drama, films etc). • Lectures • Simulations of procedures and processes

Medium	Technologies for Delivery	Educational Applications
	Video cassettes	<ul style="list-style-type: none"> • Video programmes as above • lectures
	DVD; video podcasts	<ul style="list-style-type: none"> • Video programmes as above • Instructional material (for examples, art pictures or biological photographs)
	Video conferencing	<ul style="list-style-type: none"> • Video conferences (with two way audio and video or one way video and two way audio) • Point-to-multi-point classes with interactive video and audio
	Computers/Internet/ mobile smartphones/iphones/tablets/	<ul style="list-style-type: none"> • Videographics • See-You-See-Me Conferences
Integrated multimedia/ e-learning	Stand-alone Computer-based workstation, CD-ROM/ DVD, CDI, flashdrive etc	<ul style="list-style-type: none"> • Presentation of information/knowledge • Simulations • Interactive exercises and assessment
	Networked Linking Computer-based workstation, CD-ROM/DVD, or Set-Top Boxes to public (Internet) or private (Intranet, LAN, WAN) networks; 'eGranary'/'Toasters'/'Breadbins' cf Mitra 'Hole in the Wall' Virtual worlds/ avatars Issues of bandwidth and cost important Challenge of complexity to manage large classes e.g. illuminate vs MOOC	<ul style="list-style-type: none"> • Presentation of material and/ or resources integrating all above media (text, audio and video) and possible applications • Simulations and virtual role plays • Assignment submission, assessment and feedback • Conferencing data, audio, video
	Emergent: Cloud computing and apps like Dropbox; LMS + PLE ...	Provides access to the same large file from multiple points of entry; resource list can be synced automatically

Table 7: Technology choices for different stages of the student walk at Unisa (from Mays 2011)

Step in the student walk	Appropriate technology for purpose and audience
1. Marketing and orientation	Provision of information in user-friendly styles and multiple modes (e.g. online, mobile– Compact Disc Recordable/Read Only (CDR), Digital Video Disc (DVD), podcast, audio/video and print) and access to OER examples of learning resources enables potential students to make more informed choices. Supported by online advisors, call centre, or staff at decentralised regional centres.
2. Application: Responsible Open Access Programme	Provision of diagnostic self-test quizzes available on-line, DVD, flash drives or in-person at regional centres can help potential students to make appropriate choices about what, how much and in what mode to study. The emphasis should be on the most appropriate route to access learning rather than on testing for exclusion. Supported by online advisors, call centre, or staff at decentralized regional centres.
3. Registration	Students can register online remotely, at a self-service terminal at a regional centre, or seek personal assistance at a regional centre. Currently, about 70% of Unisa students register on-line. A technology-enhanced registration process allows for automatic pop-up alerts regarding pre-and co-requisites, possible exam clashes, workload challenges and work-integrated learning (WIL) components, such as teaching practice. It also allows for the possibility of access to digital versions of resources immediately on successful registration through the use of a “toaster” (a terminal allowing students to download digital versions of study materials to a CD or flash drive).
4. Teaching and learning	
Orientation	<p>Traditionally, Unisa has relied on printed tutorial letters at programme (300 series) and module (100 series) levels for orientation purposes and these are also available in Portable Document Format (PDF) online and so can be downloaded should students lose their copy. Other orientation possibilities include youTube, video-conferencing, satellite TV or radio broadcast, video on DVD or podcast, an etutor led small group online or tele-conference, and where the need exists and numbers justify it, even a face-to-face contact session in a regional centre, other institution, school, church hall, teacher centre, etc.,</p> <p>All contact with student-teachers should consciously model appropriate teacher-student behaviours.</p>
Maintenance/Formative assessment	<p>In many institutions, formative assessment in the form of assignments is a pre-requisite for entry to summative assessment (most often in the form of a formal examination).</p> <p>Ten percent of students either do not complete or do not pass their formative assessment.</p>

Step in the student walk	Appropriate technology for purpose and audience
	<p>So:</p> <p>Provide Short Message Service (SMS) and email reminders of deadlines</p> <p>Set up online discussion fora related to assignment preparation.</p> <p>Provide for an etutor or student led (peer collaborative learning - PCL) small group online or tele-conference, and where the need exists and numbers justify it, even a face-to-face contact session.</p> <p>Provide for online, postal and in-person submissions.</p> <p>Provide for online marking and marks submission.</p> <p>Automate routing of non-submissions or weak submissions for pro-active follow-up by an etutor—by phone, email or skype.</p> <p>Provide feedback on problem areas in a tutorial letter, email, sms, in the online forum, via etutor or face-to-face tutor.</p> <p>For the joint exploration of practice consider having students engage with digital copies of lesson planning documents and videos of classroom practice and encourage critical engagement online, by mobile, in an etutorial or in a face-to-face tutorial; maintain a programme and teaching practice website throughout the programme including updates on policy, news articles, and research publications. etc. as well as informal chat room facilities</p>
Consolidation/Summative assessment registration	<p>Ten percent of students successfully complete the formative assessment but although registered to attempt summative assessment do not present themselves.</p> <p>So:</p> <p>Provide SMS and email reminders of timetables.</p> <p>Provide SMS or online booking of exam candidacy and automated reminders for deferrals.</p> <p>Automate routing of non-registrations for pro-active follow-up by an etutor—by phone, email or Skype.</p> <p>Provide feedback on key areas/assessment foci in a TL email, sms, in the online forum, via etutor or face-to-face tutor, or use YouTube, video-conferencing, satellite TV or radio broadcast, video on DVD or podcast.</p>
Summative assessment	<p>Of the 80% of students who present themselves, 70% of Humanities students pass first time (pass rates tend to be lower in other fields), yielding an initial cohort throughput of $80\% \times 70\% = 56\%$. Track trends automatically to prioritize interventions.</p> <p>Where possible provide both online and more traditional opportunities to</p>

Step in the student walk	Appropriate technology for purpose and audience
	complete summative assessment Automate routing of no-shows or poor performance for pro-active follow-up by an etutor—by phone, email or Skype
2 nd examination opportunity	At Unisa, students who fail a module with a stipulated subminimum can register for a second examination opportunity in the following semester. Provide SMS and email reminders of timetables. Provide SMS or online booking of exam candidacy and automated reminders for deferrals. Automate routing of non-registrations for pro-active follow-up by an e-tutor—by phone, email or Skype. Provide feedback on key areas/assessment foci in a TL email, sms, in the online forum, via e-tutor or face-to-face tutor, or use YouTube, video-conferencing, satellite TV or radio broadcast, video on DVD or podcast.
5. Graduation and alumni	Build and maintain a database of graduates; keep regular contact with alumni through a quarterly e-newsletter; conduct e-impact studies; recruit graduates as e-tutors ...

Concluding remarks

This manual provides an introduction to curriculum and course design and materials development for ICT-supported, distance learning provision with some examples of work that was done during a workshop in Patna, Bihar, in the period 04 to 15 March, 2013. Appendix 6 contains examples of draft resources developed by SCERT teams during the workshop process, which illustrate the ways in which the design of learning resources will need to change to give effect to the vision of more teachers and better teachers in Bihar.

You might find the following links useful for some more detailed follow up reading:

- <http://www.saide.org.za/design-guide/>
- <http://elearningindustry.com/the-history-of-distance-learning-infographic>
- <http://www.learning-theories.com/piagets-stage-theory-of-cognitive-development.html>
- <http://www.learningsolutionsmag.com/articles/1102/>
- <http://www.sparkschools.co.za/education-at-spark/blended-learning/>

Appendices

Appendix 1: An example introduction to a module

Introduction to the module

As a student on the ACE programme for school leadership you will be actively involved in a learning process aimed at developing or improving your competence in respect of a range of areas relating to your management and leadership role in the school system. You will also be continuously assessed through a variety of formal and informal assessment methods. The main purpose of these assessments will be to gather evidence of your achievements against the outcomes described in the exit level outcomes of the qualification (see **Text 1** in your **Reader**). At the end of the programme all the results from these assessments will be considered in deciding whether you have met the requirements to be awarded the ACE qualification.

If you have already been involved in school management or leadership for a number of years, it is likely that you already have many examples of such evidence, e.g. project plans and budgets you developed, procedures you established in your school, minutes of disciplinary hearings, and other records of actions you took to improve school administration. Therefore, you will have historical evidence from previous work, as well as current evidence, which you will be developing as part of the ACE programme. You will also have evidence that you generate in your daily work in the school while you are in the programme.

The question is then: How do you ensure that all the evidence you have (that reflects your competence in areas covered in the ACE programme) is considered during the formal assessment? How do you compile all this evidence in a way that assessors will be able to use in determining whether you should be awarded the qualification? This is where the portfolio comes in, and the aim of this module is to assist you to compile your portfolio to ensure that it contains relevant evidence of your competence in relation to the ACE qualification.

Exactly what is the portfolio that you will have to compile? Your portfolio will be a collection of evidence from diverse sources that you put together and submit to assessors who will use it to assess your competence against the requirements specified in the ACE qualification.

What is the purpose of this module?

The main purpose of this module is to assist you to compile a reflective portfolio with evidence of your competence in school leadership and management. The secondary purpose is to enable you to understand the use of portfolios as an assessment instrument, so that you will be able to promote their use for assessing learners in your school. The module should enable you to successfully complete the unit standard, 'Develop a portfolio to demonstrate school management and leadership' (SAQA ID number 115438 – see **Text 2** in your **Reader**) which is included in the ACE qualification.

Why have a portfolio module at all?

You must be wondering why you are doing a module on portfolio development and developing a portfolio. This is a) to give you credit for the design and process in

developing a portfolio, b) to highlight its importance, and c) because in your professional work you need to understand what a portfolio is and what it can do.

What is covered in the module?

This module comprises an introduction and three units as follows:

- This introduction, which gives a broad overview of the module and how it relates to the rest of the ACE qualification
- Unit 1, which covers the nature of the portfolio as an integrated and flexible outcomes-based assessment instrument
- Unit 2, which covers the planning and preparation for the portfolio
- Unit 3, which deals with the actual process of compiling the portfolio.

How does this module relate to the rest of the ACE?

The portfolio unit standard has been included in the qualification because the designers of the qualification assumed that not all students in this programme would know how to develop a portfolio that reflects their management and leadership competence. Therefore this module will guide you through the process of developing a reflective portfolio to record all evidence relevant to the four core unit standards of the ACE qualification that cover the key competencies of school managers/leaders.

These five unit standards are described in the portfolio unit standard as the ‘core exit level outcomes’:

- Demonstrate effective language skills in school leadership and management (ID number 115440)
- Lead and manage people (ID number 115437)
- Manage organizational systems and physical and financial resources (ID number 115434)
- Manage policy, planning, school development and governance (ID number 115439)
- Manage teaching and learning (ID number 115436).

The final portfolio will therefore be a comprehensive record of all the evidence that you produced during these four core modules of the programme, which would include completed assignments, written tests, work-based projects, etc. The portfolio will also contain relevant evidence that you may have produced during the execution of your regular school management/leadership functions, either before or during the programme, on condition that these relate directly to the outcomes in the above-mentioned core unit standards.

How will this module be assessed?

Only a small part of this module will be assessed on its own while you are completing this module. The main assessment of the portfolio will happen throughout the programme, with the final summative assessment being conducted at the end of the programme, i.e. towards the end of your second year. The reason for this is provided in the range statement of the portfolio unit standard that specifies that the portfolio must provide “evidence of applied competence in terms of the core exit level outcomes of the ACE (School Leadership)”.

This means that you will use the portfolio to record all the evidence that is relevant to the core exit level outcomes of the ACE qualification. Unit 3 will cover issues around evidence and provide guidelines on how to select evidence that is relevant to these outcomes.

The ACE qualification (under 'Moderation options') states that providers offering this programme may use their own qualified staff as assessors. They may also use the services of tutors, departmental advisory staff and fully qualified educators acting as mentors, as well as outside assessment agencies. It furthermore states that "All of these [external] assessors should be registered with the relevant ETQA and/or the accredited provider".

The qualification (see 'Integrated assessment' in **Text 1**) also makes allowance for the use of other forms of assessment, such as self-assessment, assessments by peers and tutors, as well as on-site verification of practical management competence by an authorised verifier.

The Department of Education has developed an 'Analytic rubric' for assessing all the modules in the ACE programme. The rubric that all assessors will use to assess the evidence produced for this module is attached as **Text 3** in your Reader.

What are the learning outcomes of this module?

At the end of this module you will be able to provide evidence of achievement of the following main outcomes:

- Understand how the portfolio can be used as a flexible assessment instrument within the context of the outcomes-based assessment system in South Africa
- Understand the use of professional development portfolios in the professional development and developmental appraisal of educators, particularly those responsible for school leadership and management
- Draw up an action plan for compiling a portfolio of evidence relevant to the core exit level outcomes of the ACE qualification
- Compile a portfolio, which will include relevant evidence, links between the evidence and the core exit level outcomes, reflective commentary, and a personal and organisational development plan.

Learning time

This module carries 10 credits. It should, therefore, take the average student approximately 100 hours to successfully complete the module. The 100 hours includes contact time, reading time, research time and time required to write assignments. Remember that about half of your time in this programme will be spent completing practice-based activities in your school. This will often involve you in discussions with your colleagues. A more specific indication of time to be spent on each of these activities will be provided in each of the units that make up this module.

Teaching and learning

This module, like the whole of the Advanced Certificate involves part-time study while you are working. Much of what you learn will therefore be dictated by your own effort and commitment. The most successful students are not necessarily the cleverest or the most experienced but rather the ones who are most disciplined, most organized, most willing to reflect critically on their own learning and most able to apply theory to practice and manage time efficiently.

However, this Advanced Certificate in Education (ACE) is also practice-based. This means that it does not only require you to read and write but also to **apply** what you have learnt, to reflect on the success or failure of the application and to learn from your mistakes.

Learning is, therefore, not simply a theoretical exercise but also a practical, experiential one.

To help you in this endeavour, the module comprises three different parts – a Learning Guide, a Reader and a set of Templates. Each of these documents serves a very specific purpose.

- The **Learning Guide** acts as your teacher/lecturer, providing you with information, guiding you through activities and stimulating you to ask questions, find answers and share what you learn with your colleagues and/or fellow students. It is informed by the assumption that learning is a process rather than an event and that students and lecturers need to accept joint responsibility for its success. The information in the Guide is, therefore, not a sufficient source of learning in and of itself. You, the learner, have to complement the information contained in the Guide by reading, researching, discussing/debating and reflecting on the issues and challenges raised in the Guide. Only then will your learning be an enriching experience.
- The **Reader** contains various texts. Some of these form the basis of the activities; others serve as exemplars of the kind of tasks that you are required to perform during the course of this and possibly other modules.
- The set of **templates** are provided for you to use in the application of what you have learnt and afterwards when you conduct workshops, do research, develop policies, write reports, etc. In this sense they serve as resources that should assist you in managing your institution in an effective and efficient way.

The following icons are used in the Learning Guide in an attempt to provide you with clear signals of what is expected of you.



STOP AND THINK

Whenever you see this icon, you should reflect on the issues/challenges presented, preferably in writing, and file it in the Reflection section of your Learning File/Folder.



ACTIVITY

When you see this icon, you will know that you are required to perform some kind of activity that will indicate how well you remember or understand what you have read or that will help you assess how good you are at applying what you have learnt.



TIME ALLOCATION

This icon is typically followed by a suggestion on the time the average student would need to complete a specific activity. If you are inclined to work either faster or more slowly than the average student the time given should be treated as a rough indicator only.



OUR COMMENT

This icon precedes the writer's comments or tutorial advice on a particular activity or text. The comments should never be read before you have completed the preceding activity since your opinion may be completely different from the writer's and still be correct. The writer is simply providing you with his/her

informed opinion.



KEY POINTS

The points following this icon are regarded as crucial to your success. Not only do they serve as a very brief summary of what has gone before but they also highlight the things that it is essential for you to know, understand and be able to apply.

Details of administrative procedures, such as the names and contact details of lecturers, dates of contact sessions, handing in of assignments, tutorial support and library services are provided in the tutorial letters of the higher education institution at which you have enrolled. Please study these letters carefully as they also provide you with the names and contact details of the lecturer/s responsible for this module.

Appendix 2: Extract from a distance learning course exemplifying key design principles

Extracts from:

Sherratt, N., Fletcher, A. & Northedge, A. 1992. Changing Communities. Living in a Changing Society series. Milton Keynes: OUUK. Pp. 8-12, 18, 23, 24

This resource was donated to the Saide resource centre for sharing with ODL practitioners more widely, long before the advent of open educational resources and creative commons licences.

section 1 INTRODUCTION

Note the clear heading for orientation.

Note the short simple sentences and conversational style, using I/we and you.

Note the use of questions to open the discussion.

Note the wide margin creating a space for students to make notes.

Note how Activity 1 introduces the topic without making any assumptions about prior learning. It raises the central question of the discussion without preloading content.

This module is about communities. But what do we mean by a 'community'? It is a word we use quite freely in conversation and yet it turns out to be quite slippery once we try to get a firm grasp on it. We live in such a large and variegated society that 'community' probably means rather different things in different places. Is a community in the Scottish Isles the same as a community in Middlesbrough or Belfast?

In some ways it seems easier to get hold of the idea of community by looking back to the villages and small towns of the past. If we were able to travel backwards in time three or four hundred years, we would find that most people in Britain lived either in a village or a small town. Imagine yourself to be one of them, looking out of your window. Who would you see? Almost everyone who passed by would be someone you knew. Not only would you know *who* they were, you would also know a lot about them. You would know where they lived, with whom, and what work they did. In fact, you would have known them for a long time. Although you would not necessarily feel friendly towards everyone passing by, you would nevertheless share a lot in common with them, having grown up in the same place and experienced a lot of the same times of hardship and plenty. People's past deeds, good and bad, would be known to all so that reputations once gained, for better or worse, would tend to last. Quarrels might run on from one generation to the next. But equally, loyalties would run strong and in times of need you would expect to be able to call on support. In short, as you looked out of the window you would see people with whose lives your own life was intricately enmeshed.

This is putting it a bit simply, but it will serve for now as one kind of image of community life. How different is it from the life you live in Britain in the 1990s? Try answering the Activity question below.

Activity 1

Look out of your window (or else imagine looking out). Who do you see?

- Do you see people you know?
- How much do you know about them? (And how much do they know about you?)
- How long have you known them?
- How much do you have in common with them in terms of your life experiences?

Looking at your answers, would you say that you live in a community?

Before you begin these questions, read the section titled 'Activities' in the Course Introduction.

Note that feedback is provided but it is tentative; it does not give a single right answer but rather seeks to develop a discussion.

Note the advance organiser letting students know what the unit is about; objectives could be used instead of questions.

Note also the indication of when to refer to other media.



This is a good point at which to listen to the audio cassette as far as the end of the discussion between Ann Hanson and Norma Sherratt.

Perhaps you have concluded that you live in a community very like the village of a few centuries ago. Somehow, though, it seems unlikely, unless you live in a very remote part of the country. Alternatively you might feel that you *do* live in a community, but one of a different kind. Although you might not know people as well as villagers of centuries ago would have, nevertheless you may feel that you have links with the people out there. On the other hand you might feel that you have very few connections with people around you and that there is no sense of community in the area worth speaking of.

In this study module we are going to explore the extent to which we actually live in communities today and, if we do, how far they are close-knit communities of the kind sketched out above. To guide us in this exploration we shall be setting out to answer the following questions.

CORE QUESTIONS

- 1 What is a community?
- 2 Are communities largely a thing of the past?
- 3 What makes communities flourish or decline?
- 4 How do different people within a community experience it?
- 5 Can communities be important within a modern society?
- 6 How do communities link up to the rest of society?

These six questions correspond broadly to the six main sections of the module, so you can return to them if at any point you lose your sense of where the module is heading.

section 2

THE MEANING OF COMMUNITY

Note the way in which the opening section and activity 2 build on the conversation started in the previous section.

2.1 What is a community?

To be able to talk about communities, we need to get a better grip on what we actually mean by the term.

Activity 2

Write down a few notes on what the word 'community' means to you. Think of your own experience, if any, of living in a community. How does life in a community differ from life without a community?

STUDY SKILLS

KEEPING NOTES WHERE YOU CAN USE THEM

Keep these notes alongside you, so that you can check back to them as you work through the module. We shall be looking at examples of different kinds of communities and at people's experiences within communities. It will be valuable to be able to compare these with your own experiences of, and thoughts on, communities. Keep your notes on a separate pad so you can add new thoughts to it as you go along. By the end of the module you will have a very interesting set of reflections on your way of life.

Note the integration of study skills for students new to independent resource-based learning.

We shall now approach our question from another angle, by trying to pick out what the distinguishing features of communities are. We shall examine five photographs very carefully. We can tell a great deal from pictures, provided we know what questions to ask.

Activity 3

Look at the five photos. They all show groups of people, but do they show communities? Which would you pick as the odd one out?



Photo 1
Quechua Indians
farming in Callejón
de Huaylas, Peru

Note how this activity continues to build the unfolding argument.

Note also the effective use of media other than print.



Photo 2 A street scene in England in the 1950s



Photo 3 London Bridge at five o'clock in the afternoon



Photo 4 An Afro-Caribbean club in north London



Photo 5 Afternoon at the school gates

Note that again the feedback is tentative and the teacher talks to the student as though they were having a conversation, rather than presenting discrete and fragmented bits of content.

Photograph 3 is meant to be the odd one out. We shall consider why in a moment. If you picked a different one, make a note of why and then see if you disagree with what is said in the discussion below.

The following activity will take longer, but will tell us a great deal. It is important to get your note pad and do this one carefully.

Activity 4

Look at Photograph 1 and write down answers to each of these questions:

- 1 Do you think that these people share a sense of belonging to a community?
- 2 If so, how close-knit do you think that community is?
- 3 What are these people doing?
- 4 How often do you think they see each other?
- 5 How well do you think they know each other?
- 6 How important do you think they are to one another?
- 7 If one of them was ill, what do you think the others would do?
- 8 What kinds of things do you think they might talk to each other about?
- 9 Do you think a stranger would find it easy to join the group?

Now answer the same questions for each of the other four photos.

Again, feedback is tentative. The focus is on having a reasoned conversation and building understanding of a concept.

Here are my answers. Obviously I am guessing, but that is the nature of the exercise. I expect my answers are longer than yours and will be different on some points. I have also added a few extra notes that I made. Don't be concerned about such differences. There are no 'right answers' here. Your answers will reflect your experience and ideas as my answers reflect mine. I am simply giving you something to compare with. The answers are numbered to match the questions.

PHOTO 1: THE PEOPLE FARMING

- 1 Yes, I would imagine they feel very much bound up in a community.
- 2 It looks as if it would be a very close-knit community.
- 3 They are farming – working together to produce food. If this communal activity fails, they will go hungry.
- 4 I would guess that they see each other every day and perhaps most of the day.
- 5 They know each other very well indeed, I imagine. Probably each of them knows almost the entire life history of each of the others.
- 6 I would guess that they are very important to each other; that their whole lives are affected by their relationships with each other.
- 7 They would certainly notice the loss of labour if one was ill; but I imagine they might also help out with food, looking after children, and so on.
- 8 I assume they would talk about whatever is important to them and to village life, though they might not need to talk a lot, since they already know a great deal about each other and share many of the same ideas.

communicating with each other over matters of common interest – not just exchanging the bare minimum for a business transaction. Community members tend to know about each others lives – a lot in the case of close-knit communities and less in the case of looser-knit ones. They take at least a passing interest in each other's welfare and, in a close-knit community, may do quite a lot to support each other. Lastly there is a difference between being a member and being an outsider, though the boundary is sharper in the close-knit communities. Members will have a sense of 'belonging' to the community. They may also feel bound up with a particular place.

This brings us to the final point of the whole exercise: a list of features which seem to be typical of communities. This is not a final and definitive list, since we have drawn it from only five photographs. But it gives us a good working base for continuing our discussion.

It is a good idea to include regular summaries like this.

And note again, the inclusion of another useful study skill below.

KEY POINTS

A community seems to involve:

- ▶ a sense of shared purpose
- ▶ regular contact between members
- ▶ communication over a wide range of shared interests
- ▶ members knowing about each other's lives
- ▶ members supporting each other
- ▶ a sense of belonging.

STUDY SKILLS

'DOING' SOCIAL SCIENCE

This has been quite a long exercise, but it gives you a taste of what social science is about: taking a fairly ordinary aspect of society – in this case photographs of groups of people – looking closely at what is going on, asking questions from a detached point of view, and thinking carefully about what the answers mean.

In fact, in moving from the photographs to the list of features of communities, we have come a long way. We now have a set of *criteria* which we can apply to groupings of people to see whether they 'qualify' as communities within our understanding of the term (or whether instead our list needs changing).

Diagrams can be very useful in helping students to see the big picture and to see connections between ideas. Graphics should support the learning process, not just 'decorate' the text.

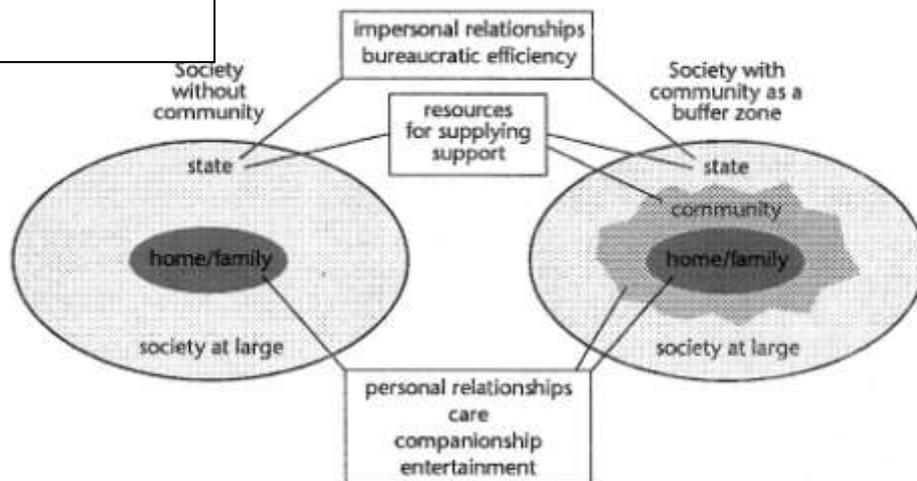


Figure 1 Community as a 'buffer zone' between family and state

If we are attracted to the version of society shown on the right, then clearly communities are important. After all, many of us are likely to need support at some point in our lives: as babies, toddlers, or school children, or as old people, or if we are without housing or work. At all these times the idea of local community-based support, which can be responsive to local conditions and needs, and to us as individual people, is likely to be attractive. But can modern communities themselves take the strain? We shall be looking in more detail at this question in Section 6.

Note the way in which the conversation has now evolved to the point where taken for granted assumptions may be questioned ...

However, we must not think of communities *only* in terms of care and support. Many people hanker after the idea of community for vaguer and more general reasons. Somehow it seems that belonging to a community ought to make life more meaningful. If you ask yourself the question, 'Who am I and how significant am I?' and then think in terms of the state and society at large, you will probably seem anonymous and unimportant. But if you think in terms of your family, that can seem a bit limiting. After all, you may not currently belong to a family and, in any case, a family nowadays is a rather small group, which may give you a very restricted backdrop against which to view your life and works as meaningful. The fact that your family thinks of you as a source of comfort and warmth, or as a high flyer, or as a black sheep, is important, but not necessarily satisfying as the entire basis on which to assess the meaning and worth of your life. It seems more appropriate to have a larger and more impartial group of people amongst whom your actions and qualities can carry significance. So communities can be important in adding another level of meaning to life, as well as offering practical care and support.

We have moved to a higher level of engagement.

Appendix 3: Example of a complete sub-section of distance education materials (available along with other OER at www.oerafrica.org).

School knowledge and everyday knowledge

6.4

Activity 31: Looking at how we sort knowledge

1. Look at the pictures below:



2. Sort the pictures into two groups, in any way that you like.

Group One	Group Two

3. Now write down a reason why you sorted the pictures in this way.

4. Look at the pictures again. Sort them into groups once again. You may sort them in any way you wish, but do so differently from the way you did it the first time.

Group One	Group Two

5. Now write down a reason why you sorted the pictures in this way.

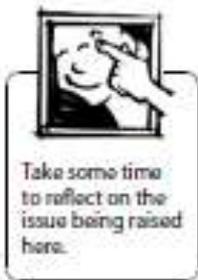
6. Now look at the two reasons that you gave for sorting the groups. Think carefully: what is the difference between the reason you gave for the first sorting and that you gave for the second sorting? Write down the difference.

These tasks were originally presented by Bernstein to two groups of seven-year-old children from the same school. One group came from middle-class homes, and the other group from working-class homes. Both groups were given a number of cards showing different kinds of food. The children were asked to group the food in any way they pleased, and then to explain why they had grouped them in this way. The children gave the following kinds of reasons.

	Working-class children	Middle-class children
Reasons	<ul style="list-style-type: none"> • 'It's what we have for breakfast.' • 'It's what Mum makes.' • 'I don't like those.' 	<ul style="list-style-type: none"> • 'They're vegetables.' • 'They've got butter in them.' • 'They come from the sea.'

Note the way in which the conversation begins with practice that then leads into theory ...

Activities need not always require a written response ...



Stop. Think.

- In what ways are the kinds of reasons given by the two groups different?
- What experiences do the groups use to explain the way in which they grouped the food?

To sort the cards, the working-class children, on the one hand, mainly used criteria which were based on the context of their everyday lives. They referred to people and events in their homes, and they expressed personal emotions. Their principles for sorting the cards were related specifically to the local contexts of their lives.

The middle-class children, on the other hand, did not use personal, localized principles for sorting the cards. Their responses were more indirect and abstract, and did not reflect their own experiences so directly.

The experiment continued. The cards were mixed up again and the two groups were asked to sort them in a different way.

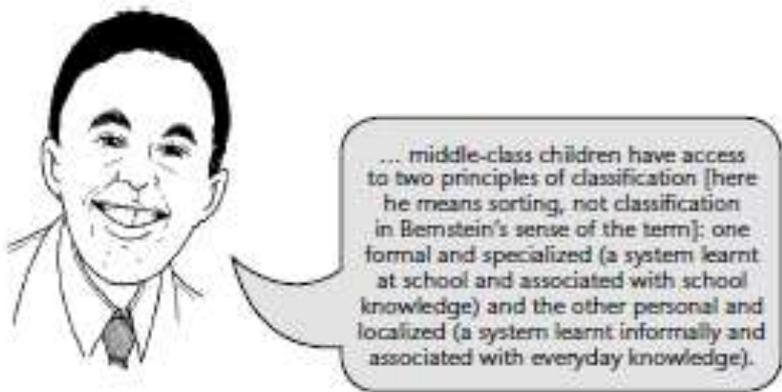
ODL materials try to create a sense of a conversation with the student ...



This time, the middle-class children grouped them according to their everyday experiences, using personal and localized categories. The working-class children sorted the cards in much the same way as they had done before. The middle-class group were able to change their principles for classifying the cards, but the working-class group did not show an ability to do this.

What does this tell us?

Nick Taylor's remarks here are taken from N. Taylor and P. Vinjevoild, *Getting Learning Right: Report of the President's Education Initiative Research Project* (Johannesburg, JET, 1999).



In the school context, where the research was conducted, the first classification principle (school knowledge) is preferred by the middle-class children. Working-class children, who have access only to non-specialized principles of classification, sorted according to their personal experience.

What do we mean by 'specialized'?

Specialized here refers to the particular knowledge, skills, and language that apply to a specific area of activity. Specialized, formal knowledge usually has special language and concepts that make it specific. For example, you may complain that you have a sore stomach. You will use the term 'sore tummy'. Your doctor will use quite different terms – he or she applies a specialized language to describe your problem, which is based on specialized knowledge. So the doctor might refer to your 'sore tummy' as 'gastroenteritis', or even, 'appendicitis'.

How would this operate in 'specialized school knowledge'? In everyday terms you might say: 'I have an apple, then someone gives me another apple, so I have two apples.'

But in terms of school knowledge you might say: 'One plus one equals two.' Here the knowledge is specialized through language ('plus' and 'equals') and concepts (addition). It is a more formal, abstract, and specialized way of thinking and speaking about things. It tends to be distanced from the personal and the local (for example your particular stomach ache, or apples).

But what does the above experiment with middle- and working-class children mean for teaching? This is what Taylor says:



The problem raised by this research is obvious: middle-class children, because of factors such as the kinds of conversations which they experience in their homes and social circles, and their access to books, computers, travel and other sources of information and experience, have ready entry into and are familiar with the principles which underlie school knowledge. Consequently, education tends to reinforce the codes which these children bring to school, and it provides more opportunities to the middle classes for success, greater access to higher education and to the professions and other higher-earning occupations.

Note the way in which the sentence ending one section provokes the question that drives the next part of the discussion ... this is an unfolding argument not discrete, fragmented bits of unconnected information ...

code: in this instance, code refers to the conventional ways of thinking and speaking that children bring to school

Working-class children have a greater distance to travel to acquire the elaborated language codes and specialized principles of classification which structure formal school knowledge.

Taylor is saying that there is a significant difference between the home contexts of working-class children and the context of the school. In some ways the middle-class children's experiences at home (what they see, do, and talk about) have a closer match with what they learn at school. But what has this to do with curriculum?

In South Africa, after the demise of apartheid, curriculum reform tried to address the very big differences between learners by introducing everyday knowledge into the curriculum. It was hoped that, in this way, the experiences of all learners would be recognized, and that all cultures and ways of life would be affirmed. However, such shifts, when they have been made in other countries as well as in South Africa, seem to produce unanticipated outcomes. Earlier we spoke about powerful knowledge. Strong classification between everyday knowledge and school knowledge means a greater chance of being inducted into specialized knowledge. We live in a society which is based on expertise, experts, specialists. Everyone needs to be specialized to do something particular. This is partly why to be specialized means to have access to powerful knowledge. And powerful knowledge provides greater opportunities and better chances in life and in work. We have to question then, whether introducing more everyday knowledge into the curriculum will help, especially working-class learners, to access better life chances. In the next activity, the implications will become clearer. Before that look at the text box below which summarizes the differences between everyday knowledge and school knowledge.

Varying the ways in which content is presented within the same argument; tables, diagrams etc helps students to make different kinds of connections and keeps them interested ...

What do we mean by 'everyday' and 'school' knowledge?

- Everyday knowledge is randomly acquired – from conversations overheard, from the TV or radio, from watching the parents, from punishments or praise.
- Everyday knowledge is unsystematic – it is picked up in bits and pieces.
- Everyday knowledge is oral – it is difficult to hold on to and repeat.
- Everyday knowledge is based on opinion – it is personal and local.
- Everyday knowledge is practical and concrete – it belongs to and talks about a particular context.
- The type of everyday knowledge that is acquired depends on family and community context and culture.
- School knowledge is grouped into particular subject disciplines – like Mathematics, Science, Geography, which develop their own language.
- School knowledge is taught systematically, with simpler concepts or tasks coming first and more complex concepts or tasks building on that later.
- School knowledge generalizes, puts ideas together into concepts and becomes increasingly abstract – it makes statements that claim to be true for many different contexts.
- Disciplinary knowledge is based on evidence – it comes from a long tradition of research and debates about what counts as important knowledge.
- School knowledge is written, which gives it more continuity over time.
- School knowledge depends on a national curriculum that is the same for all children.

Activity 32

Now read the following transcript of an actual grade one lesson, conducted after the introduction of the new curriculum reforms that emphasized everyday knowledge. Then respond to the questions that follow it. The teacher's name is John.



Transcript of an actual grade one lesson	
John:	I want us to talk about milk. What do we do with milk?
Learner:	We pour it on cereal. And on tea.
John:	Who drank milk this morning?
There is no response from the learners.	
John:	Where do we get milk?
Learner:	In oats.
Learner:	Cornflakes.
Learner:	In tea.
Learner:	From a cow.
John:	Let us brainstorm a cow.
John sticks a picture of a cow on the board, over the word 'cow'. He writes the word 'milk' on the board. Although there are real cows milling about all over the township in which the school is situated, John continues:	
John:	Let me show you a cow. Some of you don't know a cow.
Learners:	We do.
John:	Show me where we get meat in the cow.
A learner goes to the board and points to the cow's udders. John leads the learners in singing a song about milking a cow. The learners all know the song, and sing enthusiastically.	
John:	You said we get meat from the cow. Who doesn't eat meat?
There is no response from the learners. John writes the word 'meat' on the board.	
John:	What colour is a cow's meat?
Learners:	Brown.
John:	We don't say it is brown, we say it is red. What else do we get from a cow?
Learners:	Fur.
John writes the word 'fur' on the board.	
John:	How many things do we get from a cow?
Learners:	Three.
John:	Count them.
John points to the three words as the learners count.	
Learners:	One, two, three.
John:	Name things we get from milk.
Learner:	Cheese.
Learner:	Amasi.
Learner:	Butter.
John:	What else do we get from milk?
Learner:	Long life.

Note the way in which the conversation begins with practice that then leads into theory and then moves back into practice ...

Transcript of an actual grade one lesson	
John:	Long life is milk.
There is silence.	
John:	Have we finished? Maybe we will remember it later, Let's go to meat. What do we get from meat?
Learners:	Bones.
Learner:	Fat.
Learner:	Lean meat.
Learner:	Biltong.
John:	Let's move on to fat. What do we get from it?
Learners:	Shoes.
Learners (shout):	Belts. Leather. Jackets.
Learner:	A pillow.
Learners:	Shirt, school bag.
John:	What I want us to do is to draw a cow. You must keep quiet because you will make mistakes if you talk.

1. In the light of what Taylor says, why is this lesson problematic? Do you think the children from disadvantaged homes will benefit from the significant amount of everyday knowledge used in this classroom? Briefly sketch your argument in your workbook.
2. Do you think that the learners have learnt anything new in this lesson? Are they able to respond appropriately to most of John's questions? To what do the questions relate?
3. Can you identify any new concepts that are introduced in this lesson?

Note the way in which the materials reflect the approach argued for in this paragraph... making a systematic attempt to expand conceptual understanding – practising what we preach!

In John's lesson there is no systematic building up of knowledge. The teacher does not move from the everyday to more formal concepts. The discussion stays rooted in the everyday, and the learners are not given an opportunity to arrive at new concepts on the basis of their experiences. The form of the discussion is unsystematic, and resembles everyday ways of speaking. When we talk, we tend to 'jump' around. We link concepts by the associations we make spontaneously in our minds, such as milk, a cow, things you get from a cow – beef, and horns. John conducts the classroom discussion in much the same way, and the content – if one can call it that – draws predominantly on everyday knowledge. John uses only concepts and content that are familiar to his learners – he makes no systematic attempt to extend their knowledge, or to take them into a deeper understanding of processes, for instance how milk comes from a cow to their tables or how leather goods are different from plastic.



Stop. Think.

- Think about this lesson for a few minutes.
- How could John have guided the learners to move beyond their everyday experiences?
 - How could he have taught them something new in this lesson?
 - What new concepts could have been introduced?
 - What resources could he have used that were easily available?

The lesson illustrates the overwhelming predominance of everyday knowledge, which sweeps across a bewildering mix of concepts: dairy products, materials derived from cattle, meat products, to mention a few. It would seem unlikely that learners will develop a systematic understanding of any of these ideas under such conditions. Indeed, the lesson seems designed to encourage the most superficial approach to learning, most of which could be related to the personal experiences of the learners, but which are unlikely to result in solid conceptual development. This is perhaps why the lesson concludes with the simple activity of drawing a cow.

This is not to say that there is no room for everyday knowledge. Concepts can be derived from real-life situations where appropriate, and concepts can be illustrated by drawing from the experience of learners. But John's lesson is not designed to encourage or facilitate any systematic conceptual development. As Nick Taylor says in the Reading on p. 276: *In the hands of teachers whose own conceptual frames are not strong, the results are likely to be disastrous where school knowledge is totally submerged in an unorganized confusion of contrived realism.*

To sum up what Taylor is saying: everyday knowledge (and discourse) is unsystematic, and tends to be disordered. It is appropriate in its context (everyday life), and as a 'ground' from which to draw examples or in which to apply learning – to make concepts accessible to learners. By starting with everyday examples and then moving on to broader concepts, we are inducting learners into formal school knowledge. But there is a danger of using everyday knowledge at the expense of conceptual development. If teachers never move learners beyond everyday knowledge, they are unlikely to develop the ability to think with more advanced concepts, or to order their knowledge in tune with the requirements of today's world.

But what about the issue that we raised earlier, that middle-class children have greater access to school knowledge than working-class children? Does a predominance of everyday knowledge in the classroom help learners from working-class families to learn better? It could be argued that it in fact achieves the opposite. A curriculum crowded with everyday knowledge does little to develop more flexible ways of knowing amongst working-class learners. The result is likely to be failure to gain access to the forms of knowledge and discourse that will open up higher levels of learning and provide gateways to the increasingly technical nature of work today.

This is how the radical thinker Antonio Gramsci put it:

[The job of the school is to] accustom the students to reason, to think abstractly and schematically while remaining able to plunge back from abstract to real and immediate life, to see in each fact or datum what is general and what is particular, to distinguish the concept from the particular instance. ... It remains the teacher's pre-eminent obligation to accelerate the child's formation in conformity with the former [concepts] and in conflict with the latter [the particular].

(Gramsci, 1986, quoted in Muller, 2001, p. 66)

We don't want to restrict any learners to the particular and the local, and in the name of equal opportunities all learners should be given access to the general and more universal forms of knowledge that mean greater access to thinking and to life beyond the here and now.



In this section the discussion moves into practical application of the new understanding ...

Activity 33

Now turn to Reading 8.6 by Nick Taylor entitled *Curriculum 2005: Finding a balance between school and everyday knowledges*.

In this extract, Taylor expands on the points we have raised in looking at knowledge and the curriculum. Taylor asserts that education generally has moved towards a competence model of curriculum. In the article he differentiates between a number of different competence models, and looks at Curriculum 2005 in terms of radical competence and progressive competence modes. Think about these questions as you read the article.

1. What is the difference between the two models in terms of their approaches to the distinction between everyday knowledge and school knowledge?
2. What are the implications of adopting a competence model of curriculum for teachers?

Using these ideal types to analyse two lessons

Brett, another teacher at Goniwe, and Marge have very different ways of teaching. Look at the following pages to see the transcripts of them teaching literacy to grade three learners.



Activity 34

1. Read the following two transcripts carefully. Then answer the following questions:
 - a. Write a few sentences on how knowledge is classified in the two lessons. Is there a strong boundary between school knowledge and everyday knowledge or a weak boundary? Answer separately for each lesson, and try to give a few reasons for your answers.
 - b. What do the learners in Brett's class learn?
 - c. What do the learners in Marge's class learn?
 - d. On the scale below, how would you rate the teacher and learners in Marge's and Brett's classes?

closed questions: questions that require simple, factual answers of the sort that are either right or wrong (open questions require learners to think about their answers).

Scale showing differences in approach from least learner centred to most learner centred				
1	2	3	4	5
Learners totally passive: respond automatically to teacher's closed questions, which are aimed only at checking that they are paying attention. Teacher's main function is to instruct and impose structure and control.	Learners more involved: some of the activities and teacher's questions require responses from learners, but these are focused narrowly on the teaching content. Only the teacher's input is recognized as having authority.	Learners required to solve some problems, and encouraged to relate work to their own experiences and interests. Teacher is in control of lesson focus, pace, and sequence, and is the main source of information.	Learners participate actively in class: expected to take a lot of the responsibility for their own learning, they often work in groups. Teacher provides structure for groupwork, and holds back from always being the main source of information.	Learners fully active and responsible for own learning: expected to initiate many activities, solve problems, investigate, and do research – individually or in groups. Teacher a guide: suggests resources and provides necessary structure only.

2. Complete the following table in relation to the lessons. (You will find this a fairly easy task if you use the lists provided in Activity 15, pages 87–88 as a guide.)

Assumptions about	Marge' lesson	Brett's lesson
Teachers and learning		
Learners and learning		
Resources		
Knowledge		
Evaluation (try to infer this from the teacher's general approach)		
Social change		

4. Now, how would you describe each lesson in terms of competence and performance models? Give reasons for your answers.

BRETT'S LESSON	
T:	We are completing the story we were doing yesterday about the seasons of the year.
T:	Let's not make a noise. We are completing yesterday's story. Have we all turned to the correct page?
Ls:	Yes, Sir
T:	We have to. We really have to complete it. We can't start a new thing without finishing it.
T:	Have we all turned to page 20?
L:	Page 22, Sir
T:	I said page 20. We are going to read it again.
T:	Let's look at our books so that we can explain some of the things that we didn't explain yesterday. So that we can explain some of the things that we didn't explain yesterday.
T reads same story as they read yesterday about the seasons of the year. He stands in front of the class.	
T:	[reading] In spring animals and birds breed and it's warmer than winter. This time is the beginning of summer. In some places it rains a lot. Autumn is a period when people harvest what they've sown and they reap vegetables [same as yesterday]. Leaves ... winter ... dry ...
T:	That is the end of the story. They have been well explained. We have to move onto something else. There are four seasons of the year: spring, summer, autumn, and winter. How many?
Ls:	Four
T:	You can see clearly the order in the picture. Autumn then winter, spring, these times follow each other my children. They start with summer, then autumn, then winter, then spring. Ehlotyeni is summer in English. It is what?
Ls:	It is summer
T:	Ehlotyeni is summer in English. It is what?
Ls:	Summer
T:	Summer in what?
Ls:	In English

We feel that this extract provides a good example of the interplay between content and activity, theory and practice, everyday and specialist knowledge, and between text and other forms of presentation ...

Appendix 4: Extract from a contact-support distance learning programme showing the suggested structure of a unit of learning

The suggested structure for a unit of learning is:

- Name of unit etc.
- Introduction to the unit
- Learning outcomes: what should the learner achieve by the end
- Content 1 short first concept/idea based on assumptions about prior experience
- Introductory activity (self-learning: write, think about, or do in the classroom)
- Feedback from the writer to promote self-reflection
- Content 2 extending the discussion and exploration of the topic
- Development activity (self-learning: write, think about, or do in the classroom) at a higher level of demand [the cycle of content – development activity – feedback is repeated as many times as necessary]
- Feedback from the writer to promote self-reflection
- Content 3 extending the discussion and exploration of the topic
- Consolidation activity (self-learning: write, think about, or do in the classroom) bringing theory and practice together in an integrated way
- Feedback from the writer to promote self-reflection
- Summary
- Self-assessment
- Conclusion
- Consolidation activity (group: study centre)
- Consolidation activity (ICT: study centre)

The following example is an adapted and annotated extract from a course that is available, along with other OER, on www.oerafrica.org.

Paper & Course Code: MTL133

Semester: One

Module: Managing teaching and learning

Unit Title: Leading and managing a school as a learning organisation

Time Allocation: 30 hours

Unit 1: Leading and managing a school as a learning organisation

Clear headings and an advance organiser in the form of an overview helps students navigate through the materials ...

<u>Introduction</u> Issues Learning outcomes	1.1
<u>Preparing yourself as a curriculum leader</u>	1.2
1.2.1 Leadership qualities and strategies for instructional leadership	
<u>The Context for School Leadership</u>	1.3
<u>Distributed Leadership</u> 1.4.1 The principal as part of the leadership team 1.4.2 Teacher leadership 1.4.3 Stimulating and motivating your educators	1.4
<u>Establishing a learning culture</u> 1.5.1 Defining a 'learning culture' 1.5.2 Being responsible for creating a learning culture in a school 1.5.3 Leading the school as context and workplace	1.5
<u>Developing plans to manage and lead</u>	1.6
<u>Concluding remarks</u>	1.7

1.1 Introduction

As a principal or prospective principal you are a leader and manager of your school. You should expect all the learners in your school to improve their knowledge and develop into the best people they can be, for the educators to teach and support the development of learners, and for the community to support the school in this quest. So, it is about the learners and your staff, not you.

Introduction provides an overview of the purpose and the content to be covered ...

However, no school is a perfect environment and school managers need to focus centrally on teaching and learning as the main purpose of education, through becoming a learning organisation. The role of principals and other school managers is to adopt a critical perspective, constantly questioning how to improve teaching and learning in your school.

In the other parts of this module the focus is on the detailed aspects on which school managers need to work in order to ensure an environment for effective learning such as how to evaluate this quest for improvement through professional performance evaluations, and what to focus on in the learning process (or details about the curriculum).

Issues

The unit will explore the following issues:

- What are the characteristics of a successful principal? What are their roles as managers and leaders with respect to teaching and learning?
- How do we identify a “good” school?
- How does a principal facilitate his/her staff and learners to be “better”? How does s/he lead? How does s/he manage?
- How would you (as principal) establish a “learning culture”?
- What is a learning culture?
- How do we create a learning culture?
- How do we facilitate learning? How does this process relate to the planning of a learning context in a school or learning organization?
- How does the principal help educators to develop innovative teaching?
- How does the principal support the professional development of the teachers and staff? To do so, how does a principal facilitate access to the required resources?

Learning outcomes

By the end of this unit, you should be better able to:

- demonstrate your personal qualities as an “instructional” leader;
- demonstrate your management and leadership style to lead all stakeholders involved in the teaching and learning at a typical “learning” school;
- explore ways of how, and under which conditions, your learners learn best;
- explore how to improve and relate your learners’ academic achievements to the quality of your leadership and to the school’s learning culture;
- indicate how your own achievements, your students’ achievements, and your staff’s achievements are all supported by international research and your collective research culture;
- improve the current professional development plans (according to national and provincial policies and guidelines).

Intro to first content topic

Learning outcomes set out what the students need to be able to do or do better by the end of the unit.

1.2 Preparing yourself as a curriculum leader

In this section we will investigate your own personal views on leadership and management at a school and then move on to developing a more collective view.



Introductory activity based on students' current knowledge/experience

Your role and vision as a principal

Reflect on the following issues privately for your journal. Leave space to add to this activity later. This will help you to link current and new learning.

1. What are your opinions about the issues faced by principals in schools today? State your country or regional context clearly. Explain/validate your opinions with examples from your experience. (Do not worry to validate your experience with other people's knowledge at this stage; we will come back to this issue later.)
2. What is your vision/hope for teaching and learning at your school?



Feedback on introductory activity

You may have written a lot in your own words, stating freely your opinions, excitement about your job, and you may have included a few real frustrating areas that concern you at the same time. Go back to your writing and mark each statement as: Exciting! (with green pen); or, Concern! (with red pen). This process of writing is a good starting point for a number of psychological and learning reasons, such as stating to yourself where you are now and where you want to go. After your learning we will come back to this exercise to compare how you may have changed or not.

1.2.1 Leadership qualities and strategies for instructional leadership

Instructional leadership may be defined as follows:

Content 1

'Instructional leadership focuses on teaching and learning and on the behaviour of teachers in working with students. Leaders' influence is targeted at student learning via teachers' (Bush and Glover 2002: 10).

Southworth (2002, 2004) prefers to use the term 'learning-centred leadership' and he argues that school leaders influence teaching and learning through three main activities:

- Modelling
- Monitoring
- Dialogue.

We shall examine each of these processes later in this module.

Southworth (2004: 78) adds that the influence of the principal on teaching and learning takes three forms:

- Direct effects – where your actions directly influence school outcomes.
- Indirect effects – where you affect outcomes indirectly through other people.
- Reciprocal effects – where leaders affect educators and educators affect leaders.

Indirect effects are the most common because principals and other managers work with and through others.



This activity will help you to link theory and practice more effectively. Drawing on Southworth's three forms of influence above, give one example of each type of effect. These may be based on your current practice or be an example of an innovation you would like to consider introducing at your school.



Development activity

1



Your examples will reflect your experience and may relate to existing, or possible new, practice in your school. Our answers are:

- Direct effects include your own practice as a teacher, and demonstrating (or modelling) good practice to your educators.
- Indirect effects include changes made by educators in response to your role in monitoring teaching and learning, and providing constructive feedback.
- Reciprocal effects arise from dialogue (see discussion above). In conversations between leaders and educators, whether formal or informal, the exchange of ideas leads to improved classroom practice.

Feedback

Extending the argument of content 1 ...

Leithwood et al (2006) are undertaking a major study of the impact of school leadership on student outcomes, for the English government. One of their early publications makes 'seven strong claims' about the impact of school leadership based on a comprehensive review of the international literature. These 'claims' are shown below, with our comments (in italics):

1. School leadership is second only to classroom teaching as an influence on pupil learning (*so you can make a real difference to your learners*).
2. Almost all successful leaders draw on the same repertoire of basic leadership practices (*see below for a fuller discussion of this repertoire*).
3. The ways in which leaders apply these basic leadership practices demonstrate responsiveness to, rather than dictation by, the contexts in which they work (*so sensitivity to context is vital but should not be an excuse for poor learning outcomes*).
4. School leaders improve teaching and learning indirectly and most powerfully through their influence on staff motivation, commitment and working conditions (*see below for a fuller discussion of this issue*).
5. School leadership has a greater influence on schools and students when it is widely distributed (*the more effective leaders there are, the greater the potential impact on learning outcomes*).
6. Some patterns of distribution are more effective than others (*notably when leadership influence is co-ordinated, for example within SMTs*).

7. A small handful of personal traits explains a high proportion of the variation in leadership effectiveness (*the most successful leaders are open-minded, flexible, persistent, resilient and optimistic*).

Basic leadership practices

Leithwood et al (2006) identify four leadership practices associated with successful principals and other school managers. These practices are shown below with our comments in italics:

- Building vision and setting directions (*what are the school's purposes?*).
- Understanding and developing people (notably to improve staff motivation and commitment).
- Redesigning the organisation (for example, team building, delegating, consulting and networking).
- Managing the teaching and learning programme (including staffing the teaching programme and monitoring performance).

Influencing staff motivation, commitment and working conditions

According to Leithwood et al (2006), successful school leaders have strong positive influences on staff motivation, commitment and working conditions, leading to enhanced classroom practices. Principals need to develop staff capacity and capability, for example through professional development and working in teams to identify and address challenges.

1.3 The context for school leadership

Content
subsecti
on 2

The third of the seven 'strong claims' about successful school leadership refers to the importance of applying leadership learning to the particular context where leadership is practised. During the ACE programme, and particularly after you become a principal, making a systematic analysis of the specific school context will be a vital part of your role.



This activity will help you to link theory and practice more effectively. Reflect on the strengths and weaknesses of your school's context. Identify three factors that underpin and support effective teaching and learning. Also identify three factors that inhibit or limit effective teaching and learning.



Development activity 2



Feedback leading into extended discussion ...

... principals in many South African schools is to work problems arising from the school's context and to build on the supportive factors. Your analysis is bound to be individual but you may wish to compare your list with those identified in the eight South

African township and rural schools studied by Bush, Joubert, Kiggundu and Van Rooyen (2008). Their main points are shown in Table 1:

TABLE 1: FACTORS SUPPORTING AND INHIBITING EFFECTIVE TEACHING AND LEARNING (ADAPTED FROM BUSH ET AL 2008)

Factors supporting effective teaching and learning	Problems inhibiting effective teaching and learning
Lively and motivated learners	Hungry and demotivated learners
Committed and experienced educators	Demotivated and inflexible educators
Supportive parents	Disinterested and/or illiterate parents and/or dysfunctional families
Good classrooms	Overcrowded classrooms
Good LTSM	Limited LTSM
Committed managers	Lazy managers
Good team work	Weak team work
Effective learning in previous schools or grades	Ineffective learning in previous schools or grades
Extra lessons to address learning deficiencies	No extra lessons to address learning deficiencies

How do your responses compare with the factors identified by Bush et al (2008)? If your answers mostly match those in the left hand column, you have a good basis for effective teaching and learning. If your answers mostly match those in the right hand column, you need to develop action plans to address these problems. Successful leaders do not simply 'accept' negative factors but work hard to overcome them. **One strategy for school improvement is to support distributed leadership.**

Note the links ...

1.4 Distributed leadership for effective teaching and learning

Distributed leadership. You were introduced to this concept in the core module *Understanding leadership and management in the South African context*. This concept has become increasingly important in practice, amid growing recognition that a single-handed leadership model, involving the principal alone, does not produce maximum benefits for the school. Distributed leadership is defined as follows:

Content sub-section 3

'Distributed leadership concentrates on engaging expertise wherever it exists within the organisation rather than seeking this only within formal position or role. Distributed leadership is characterised as a form of collective leadership in which teachers develop expertise by working together. In short, distributed leadership equates with maximising the human capacity within the organisation.' (Harris 2004: 14)

In this model, the principal is not the sole leader, but is at the heart of a series of interlocking teams, working together to improve the school and enhance learner outcomes.

1.4.1 The principal as part of the leadership team

Team-work is at the heart of a distributed leadership approach. The principal needs to be a member of some school teams, and a coach to others. As such, the principal is the catalyst for: improved student achievement, provision of resources, and architect of improvement plans, assessor of progress, and reward giver.

This process of content – development activity – feedback – content continues through several more cycles ...

1.6 Developing plans to manage and lead

School improvement plans, or development plans, generally include a sequence of activities beginning with a needs assessment or situational analysis, followed by planning, implementation or action, and evaluation, leading to a further development cycle. The following activity draws on all that we have learned so far.



ESTABLISHING SCHOOL NEEDS COLLABORATIVELY

This activity, which could take 1-3 hours, will help you relate what you have learned to practice in your school.

Answer the questions in the checklist below (table 2). Think in all cases about your own school. As an individual, reflect on the picture that emerges. Try to be as objective and honest in your responses to the checklist as you can.



This is a consolidating activity which draws together learning from across the unit in an integrated way ... It might also be the basis for a discussion at a study centre ...

TABLE 2: NEEDS ANALYSIS FOR WAYS OF LEADERSHIP PRACTICES (2001), STINNETT

FROM EMERGING

WAYS OF LEADING AND MANAGING	ALWAYS	OFTEN	SOME-TIMES	NEVER	STEPS FOR IMPROVEMENT
	(3)	(2)	(1)	(0)	

WAYS OF LEADING AND MANAGING	ALWAYS (3)	OFTEN (2)	SOME-TIMES (1)	NEVER (0)	STEPS FOR IMPROVEMENT
Do we (as SMT ²) articulate our shared purpose and vision of learning?					
Do we protect a learning vision and make it visible?					
Do we communicate our values and mission in the things we do, how we spend our time, and what we consider important?					
Do we all take collective responsibility for school practices, safety, health, and discipline?					
Do we embody “power through” (no “power over” people)?					
Do we use (a) alternative punishment (not corporal/body punishment) and (b) positive rewards?					
Do we facilitate, guide, and/or coach others to adopt practices that advance the performance of our learners (academic and social)?					
Do we provide social support for high achievement (learners, staff)?					
Do we communicate a passion for learning (and challenge ineffective practices)?					
Do we support research-based risk-taking and innovative practices?					
Do we have discussions and inquiry about practices?					
Do we share information and research?					

² SMT means School Management Team

WAYS OF LEADING AND MANAGING	ALWAYS (3)	OFTEN (2)	SOME-TIMES (1)	NEVER (0)	STEPS FOR IMPROVEMENT
Do we attempt to solve problems collaboratively/together?					
Do we use multiple approaches and solutions or rely on single answers from past practices?					
Do we consider a variety of points of view for solving important problems?					
Do we make decisions that are consensual and inclusive?					
Do we provide formal and informal ways for staff or learners to raise and/or solve problems?					
Do we ensure an accepted learning system to make learning focussed and clear?					
Do we expect teachers to keep the focus on learning?)					
Do learners acquire essential skills and knowledge at sufficiently high levels?					
Do we engage learners actively in sense-making events?					
Do classroom practices develop values, thinking skills and appropriate memorization of concepts and skill?					
Do classroom practices provide opportunities to apply and use knowledge in a variety of contexts?					
Do we support learners to be responsible for their own learning outcomes?					

WAYS OF LEADING AND MANAGING	ALWAYS (3)	OFTEN (2)	SOME-TIMES (1)	NEVER (0)	STEPS FOR IMPROVEMENT
Do we use a variety of learning experiences and styles (such as cooperative/group learning and independent work, with or without competition)?					
Do we have interdisciplinary learning in the curriculum?					
Do learning experiences in our school incorporate out-of-class resources (from visits, trips, experiences, practical work, the Internet, business)?					
Do we find the time, resources, and support for professional development to improve our teaching and learning?					
Do we share our new learning, successes, and failures (model life-long learning)?					



*This exercise provides a valuable means of establishing the school's current position, prior to introducing change. If your responses are mostly negative, you have to think about how you will be able to introduce and sustain innovation to bring about improvement. Asking other managers and your educators to complete the exercise too would be a helpful starting point. Schools operate in different contexts and different people interpret the strengths, weaknesses, opportunities and threats of this context differently. **We will discuss your findings in the study centre group meeting.***



- In order to continue to be relevant and to develop, the school needs to become a learning organisation.
- This means developing a learning culture and that presents particular challenges when working with experienced professionals.
- We looked at the nature of the school as a workplace and the tension between professional and organisational needs.
- We considered the notion of distributed leadership and how management has become a shared activity.
- We observed that schools and classrooms are much more open than in the past and increasingly need to be able to account for the resources that they use.
- Finally, we emphasized the need for continuous conversation and the asking of critical questions about core teaching and learning issues.

Summary of main points

1.7 Concluding remarks

In this unit we explored the notion of the school as a learning organisation promoting a learning culture. By reflecting on our own experiences, we realised that staff will need support in developing the kind of critical reflection that makes ongoing professional learning possible. We suggested that staff meetings should focus as much on key learning and teaching issues as they do on administrative matters. However, as we have seen, there are many other factors that have an impact on the quality of teaching and learning in a school and which need to be managed.

The notion of the school as a learning organization constantly engaged in critical reflection on its practices and achievements is as important in the supporting elements as it is in the central processes of teaching and learning. It will be discussed further in the next unit.

Self-assessment



Taking time to reflect on what you have learned will help you to identify both strengths and weaknesses in your understanding and practice. Spend 15 minutes skimming through the unit.

Then look again at the learning outcomes at the start of the unit.

1. Do you feel that you can now do all the things listed there?
2. Revise any sections you are not sure about.
3. Make a note of any questions you want to discuss with your peers at the study centre.



Study centre: group activity



Taking time to discuss what you have learned with others will support your self-assessment and enable you to showcase your strengths and address any outstanding weaknesses in your understanding and practice.

During the study centre group discussions, we will spend about 1 hour reviewing ideas related to this unit of learning.

At the study centre discussion for this unit we will:

1. Compare your findings from Activity 1h.
2. Discuss any outstanding problems you encountered during your self-study of this unit.



Study centre: ICT activity



Developing skills to use ICT in support of teaching and learning is one of the objectives of this programme.

At the study centre discussion for this unit, you will develop a Powerpoint presentation summarising the key concepts covered in this unit.

This should take about 30 minutes.



Appendix 5: Illustration of the course design structure applied to a digital environment



Introduction

This short demonstration is designed to provide you with ideas on how to integrate ICT into your subunits. Remember this is a requirement in terms of the new structure we developed yesterday. the demo should be seen as extension of all the work we have done this week.

Think about this open question: "What new ICT based tools can I use in the design of the Sunday Facilitated Session that I have never used before?" We will address this question again at the end.

Introductory Activity: ICT Proficiency Levels

Use the 'Choice' Tool below to rate your own competence in using computers to perform your daily work tasks.

My ICT Proficiency Levels

Feedback

Click the link below to see the facilitator's feedback for this activity

Feedback for ICT Proficiency Levels Activity

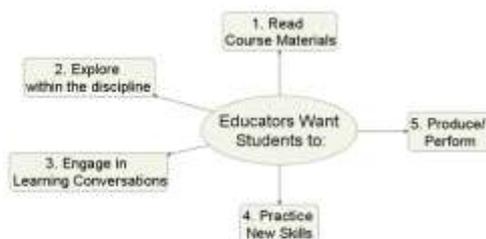
2 Five Challenges for Teacher Educators

At a practical level level educators want to facilitate learning activity by students. Teaching alone is no guarantee of learning unless students are able to:

- Engage with the core course materials
- Explore their areas of interest within the discipline
- Engage in learning conversations including key debates
- Practice new skills
- And ultimately produce/ perform in a way that shows the development of graduate and professional skills

How can educators use educational technologies to support these goals.

Based on Laurillard, D. *Rethinking University Teaching: A Framework for the Effective Use of Learning Technologies*. Routledge Falmer 2001.



Added URL:

[Slipping Tool](#)

Added Chat:

[Pros & Cons of Distributing Digital Course Materials](#)

Added URL:

[Google Scholar](#)

Added URL:

[Custy](#)

Added Forum:

[Academic Search Engine Characteristics](#)

Added Page:

[Feedback for ICT Proficiency Levels Activity](#)

Added Page:

[Feedback Accessing Digital Files Activity](#)

Added Page:

[Feedback for Academic Search Engines Activity](#)

Added Page:

[Feedback on Social Network Activity](#)

Added Forum:

[Simulations](#)

[Simulations](#)

Added Quiz:

[Self Reflection: Ethical Activities Demonstration](#)

New forum posts:

Admin User 14 Mar, 05:58
["Simulations"](#)

Active chat sessions:

14 Mar, 07:50

[Pros & Cons of Distributing Digital Course Materials](#)

- UNESCO Evaluator
- World Bank
- Mohan Das
- katyayan tripathi

Navigation

[Home](#)

[Site pages](#)

[Courses](#)

[Pure Sciences](#)

3 Read Course Materials

Digital text files are now very common. Popular formats include: .doc, .docx, .txt and .pdf. Your lecture notes can be distributed in a digital format. However, lots of education content is available as a PowerPoint presentation (.xls and .xlsx) and Maths or Statistics education content is available as a spreadsheet. These can also be distributed using the same digital technology.

Digital audio files have always been a powerful learning resource across several disciplines but we now have access to a wealth of digital audio files in almost every domain and the ability to easily develop and share these ourselves. These files can be used to support reflective learning on the move wherever students have access to computers, cheap mp3 players or mid-range cellphones.

The pervasive availability of **digital video** allows access to teaching resources by experts across the world and opportunities to share local expertise globally. These services work best with a broadband internet connection and sometimes terms of use don't allow educators to download and share files locally. Teachertube is a counterpart to YouTube where educators from several continents share educational videos.

Development Activity: Accessing digital files

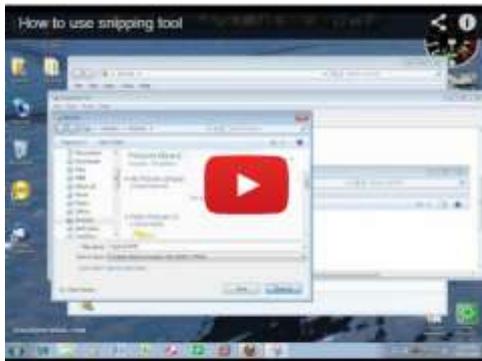
- Use the hyperlinks below to access digital content. They include a text document (.pptx), and audio file (.wma) while the last resource is a video available either as a hyperlink or alternatively embedded into the Learner Management System (LMS).

-  [Summarizing the Content](#)
-  [DemoAudio](#)
-  [Snipping Tool](#)



▼ BAD001

- Participants
- ▶ General
- ▶ Greetings
- ▶ Read Course Materials
- ▶ Explore Within The Discipline
- ▶ Engage in Learning Conversations
- ▶ Practice New Skills
- ▶ Self Assessment
- ▶ [WCD](#)
- ▶ [WCD2](#)
- ▶ [WCD3](#)
- ▶ [WCD4](#)



Consider your experience. Which ones were easy to access which ones problematic? What implications does this mean for your own course design. Use the Chat tool below, called 'Pros & Cons of Distributing Digital Course Materials' to discuss the pros and cons of distributing course materials in these different ways.

[Pros & Cons of Distributing Digital Course Materials](#)

[Feedback: Accessing Digital Files Activity](#)

▶ the link below to see facilitator feedback for the previous activity

[Feedback Accessing Digital Files Activity](#)

4 Explore Within The Discipline

How can I get the students to read beyond the given materials', is often an issue for lecturers. ICT can help you here by providing both access to good content, such as [Wikipedia](#) and [Khan Academy](#) etc., towards which you can steer students but also provides some excellent tools to find academic materials. Search engines designed to return results that have an 'academic' bias to them are particularly useful.

Developmental Activity: Academic Search Engines

- Do an evaluation of the following academic search engines, Google Scholar & Clusty. Remember you are looking for a tool to help students 'Explore within the Discipline'.

 [Google Scholar](#)
 [Clusty](#)

- In the forum entitled 'Academic Search Engine Characteristics' Identify which of the two you prefer and provide reasons why.

 [Academic Search Engine Characteristics](#)

Feedback: Academic Search Engines

Use the link below to get facilitator Feedback on this activity.

 [Feedback for Academic Search Engines Activity](#)

5 Engage in Learning Conversations

This used to mean a discussion in a tutorial or lab session or individual consultations but now new technologies offer a richer experience..

- Online discussions (Forums)
- Online chats (Chat)
- Blogging (Blogs)
- Instant messaging
- Text messages (SMS)
- e-Mail
- Social networking e.g Twitter, Facebook, Linked in etc.
- Skype calls (Voice over Internet and recently Video Cam).

All the qualities that we associate with deep face to face learning conversation can be taken online. These include excitement, discovery, trust, intense listening and flow. As in face to face interaction this requires good facilitation. What's different is the effective use of the online environment to provide conversational spaces and tools. Chat and Forums we have already looked at but here are some more tools to help provide students engage in learning conversations.

Blogs

Student blogging can support the development of voice and fluency in chosen genres. It can also support reflective learning. In this example from University of Cape Town a student blogger grapples with the issues of identity which are debated in a first year Humanities course. The student blog post is available [here](#). Common blog platforms include [Blogger](#) and [WordPress](#)

Skype (Voice & Face over Internet)

[Skype](#) originally allowed you to make audio conference calls using the Internet as the channel of communication. In recent years as bandwidth has improved they have added video so now its possible to link your students with an outside expert in order to 'Talk the talk'. Skype, a free service also includes a handy instant messaging service for when bandwidth is really poor.

6 Practice New Skills

There is nothing that beats the real thing. If you want to train someone to lay the foundations of a structure, doing it for real is the best way to learn. Student teachers should spend as much time in the class as possible. Doing for real is not always possible, either because of cost or numbers of students that need to be processed. Also sometime there is danger associated with the skill. That's when ICT can help using other tools:

Drill and Practice:

Computers are very good at providing an inexhaustible number of problem variations. Maths packages can provide numerous exercises where the student continues to work on them until mastery.

Simulations:

Computer programs that try to approximate, as close as possible, the real experience. These simulations are usually cheaper than having to set up the activity in reality so work well with large groups of students.

Developmental Activity: Simulations

Access and review the following two simulations:

- [Reactions and Rates](#) (Univ. Colorado)
- [Virtual Compound Microscope](#) (University of Delaware)

Then in the Forum entitled 'Simulations' identify when simulations would be appropriate in your lesson design.

 [Simulations](#)

 **Feedback:** Simulations

Click the link below to get facilitator feedback on the previous activity.

 [Simulations](#)

7 Produce / Perform

Students must be able to produce knowledge and demonstrate understanding in forms such as reports, models, performance or media....

The digital tools include collaborative writing environments and specialist production software to support flexibility and creativity...

But don't also forget the common office productivity suite that contains a word processor, spreadsheet and a presentation package.

8 Summary

The main points of this demonstration are:

ICT can be used to support learning in the following ways.

Students can:

- Access and read digital course materials;
 - Digital text files (e.g. .doc and .pdf)
 - Audio files (e.g. .mp3)
 - Video Files (e.g. .mp4)
- Explore beyond the course materials;
 - Academic Search Engines
 - Additional internet materials
- Engage in conversation around the subject
 - Tools include blogs, chat, forums, Social networks
- Practice new skills
 - Drill and Practice programs
 - Simulations
- Perform
 - Specialised packages e.g. CAD or Accounting software
 - Office suite tools. e.g. Word Processor.

9

Conclusion



This short demonstration should have provided you with some ideas that you can now insert into your lesson designs. Hopefully you will not see it as a stand alone course but rather as a building block to improving your own course development.

10

Self Assessment



Reflect on the content and activities you have performed during this short course. Then complete the quiz below, entitled 'Self Reflection: Bihar Activities Demonstration'. This self reflective activity will help you consolidate what you have learned and also provide the facilitation team with data to support you and your colleagues going forward.

 [Self Reflection: Bihar Activities Demonstration](#)

Appendix 6: Draft example resources developed by SCERT staff in a workshop session

In the examples provided below, we have highlighted key design features in red.

Example 1. Demonstrating the relationship between different components of the programme

Paper and Code: Child Development and Psychology

Semester 1st:

Module F2

Unit Title: Child Development: Concept and Understanding

Time Allocation: 120 min

Introduction:

The unit introduces you to knowledge about the growth and maturity phases of human beings. You are aware that human beings keep changing through their lives, which is visible in changes in size, appearance and physical make up. And so the teacher should have the knowledge of different stages of human growth and development, like how the child expresses his emotions, how he interacts with the society, develops his thought process etc.

Q;- There are two brothers studying in Std1 and Std 7. Write five points of growth and five points of development visible in them. .

Q.; What are the changes that you observe in two brothers studying inStd1 and Std7? And if there any difference, then why ?

Objectives or Outcomes

You would be able to

1. Define growth and development
2. Differentiate between growth and development
3. Discuss the principles of development
4. Enumerate the different dimensions of development
5. Explain the role of family, teacher, community and mass-media in growth and development.

Content 1- Meaning, Nature and Importance

Introductory Activity: [Self-study]

You look at the two pictures

1 depicting the life cycle of a tree i.e. seed – sapling- plant – tree

2. depicting the life cycle of a human being – infancy-early childhood- adolescence-young adulthood and aged adulthood

Note down the major changes visible in the different stages of growth in the tree and the human being.

Feedback:

The above two pictures point to the fact that every living organism grows, has a life cycle and passes **through various stages of growth. The term 'growth' is used exclusively to refer to changes that are quantitative in nature.** It is used purely in a physical sense which implies changes in size, height and weight.

Content 2. Growth and development-----principles, factors and dimensions

The term growth and development are often used interchangeably, but they are conceptually different. You are aware that growth refers to quantitative changes in size which includes physical changes in height, weight, size, internal organs etc.

On the other hand, Development refers to qualitative changes taking place simultaneously with quantitative changes of growth. It refers to a progressive series of changes that occur in an orderly predictable pattern as a result of maturation and experience. The factors affecting growth and development are mainly heredity and environment etc.

Development Activity: [Self-study]

To help you understand the various dimensions of development , namely physical, mental, emotional ,social and moral you are provided with five pictures below- Dara Singh, Vishwanathan Anand, Anna Hazare, M.F. Hussain and that of Mahatma Gandhi.

Please match the pictures with various dimensions of development.

- Moral development-
- Emotional Development
- Social Development
- Physical Development
- Mental Development

And give the justification for choosing so.

To know the principles and stages of growth you are asked to arrange in sequence the jumbled pictures depicting **the various stages of growth ...**

OR

Make a comparison of two children of the same age and sex and list the similarities and dissimilarities and state the reasons for this where possible.

Feedback

With the help of above activities, you would be able to explain the principles of development, dimensions of development and factors affecting development that play an important role in the growth and development of every child. A child is not only an individual but also a member of the society.

Content 3: Role of family, teacher, community and mass-media in child development

A child grows in the society and so it is obvious that in the process of growth and development he/she would be influenced by it.

Family being the first school, the child learns the basic mannerism, etiquettes and lessons in discipline from there. In the school his/her skills are sharpened and he/she also learns to adjust in the society and community. When the development pattern is normal, one period prepares the child **for the other and leads them effectively into the next. In the electronic age child's thinking is** definitely influenced by mass media namely, TV, newspaper, cinema, magazines, internet etc.

Consolidation activity [self-study]

- Make a comparison of the characteristics of a boy in earlier childhood and adolescence and state the reasons for it.
- Write the events of your own childhood and adolescence that reflect the characteristics of these periods.

Summary:

In this unit we studied the meaning, nature and importance of growth. We saw how growth differs from development as the former relates to quantitative changes and the latter to the qualitative changes. Principles of development namely continuous, sequential, differential, interrelated etc. have also been discussed. The various factors affecting the growth have been dealt with and the understanding of various dimensions of development has also elaborated upon. In a child's development family, teacher, community and mass media play an important role and all the above factors should be used judiciously to draw the best out of the child.

Self-assessment activity [self-study]

Think about the following questions.

- Q1. What do you mean by growth? Discuss its nature and importance.
- Q2. Differentiate between growth and development.
- Q3. Explain the principles of development.
- Q4. Enumerate the different dimensions of development
- Q5. **What is the role played by the following in child's growth and development**
 - Family
 - Teacher
 - Community

- Mass media.

Conclusion

Human beings are never static because change takes place from birth to death. The term growth refers to quantitative changes and development to qualitative changes. The important principles of development are continuity, sequentiality, differentiability and generality to specificity. Knowledge of patterns of development will help you to know what to expect of children and also to know of the behavioural changes that take place in each stage of development. Family plays an important role in a child's **growth and development and later on school helps him/her** in developing mental, social and emotional faculties. In the age of electronic revolution the influence of mass media cannot be ignored. In the next unit you will study in depth about physical and motor development of the child.

Consolidation activity: (Group study centre)

This is an activity that can be discussed at the study centre.

You should find out the mean height, mean weight and mean achievement score of a class in your school and also find out the Normal deviation. You should investigate it in causal terms and list the factors responsible for it and also suggest the remedial measures. Bring your report to the study centre.

During the discussion, we will explore how different teachers went about the task and analysed their results. We will also discuss the findings. This should help us to get a better idea both of the processes involved as well as the variation among the children we teach.

Consolidation activity: (ICT study centre)

With the help of your teacher educator, you will put on the website the main findings of your survey and try to correlate the results with the findings of other centres. You may also find a good website that deals with the above topic and enter its name in the LMS for future reference.

Contributors: Amita Mishra

Demonstrating the links within units of learning, the integration of study skills and the tentative nature of knowing

Paper & Code: F-2

Semester: First

Unit:1

Unit Title: Child Development: Concept and understanding

Time Allocation: 2 hrs

Introduction

Every teacher, teaching a class of students has to understand the process of and how much learning takes place in a child. Hence he/she has to know the factors associated with the child as he/she grows. There is the physical, motor, cognitive (mental), social and emotional development in a child that goes on together with his growth. The teacher has to understand the role of the parents, siblings, family, peer and environment in this growth and development of the child.

What are the changes that take place in a child as he grows from 6 years to 14 years? What are the factors which affect these changes?

Objectives/ Outcomes

By the end of this unit you will be able to

- explain the different stages and the different aspects related therein, in a child's growth and how changes occur
- relate the growth to the factors which help in the child's growth and development
- describe the effects that the family, teacher, society and the media have on the growth and development of the child.

Introductory

Activity

This activity will help you to think about the nature of development of the child. This will take about 20 minutes.

Look at the following picture (A picture showing a small child playing with toys and an adolescent with muscular arms and a small growth of beard is shown to the learner.)

Make a note of the answers to the following questions:

1. What do you see in the picture?
2. How are the two images different from each other?
3. When do you generally see these differences in children?
4. What do you think are the factors affecting and bringing about this change?

Feedback

You probably saw that these are two images of the child and the young boy. You have also noticed the activities of the two images. You have noted the differences in the physical and facial expressions of the two images, the approximate age of the child in the images and also some factors that helped the child to grow from childhood to the adolescent stage (like the family, friends, environment etc).

Content

1

Child Development: The concept and understanding

Development Activity:

This activity will help you to understand the age profile and the behaviour patterns in the children from 6yrs to 14yrs of age

This is a classroom focused activity and it will take about 15 mins.

Imagine three groups of students of different ages of

6-8yrs (1st std & 2nd std) ,

8-10 yrs(3rd & 4th Std) and

10- 14 yrs(5th & 6th std)

Recall & write the characteristics of growth and development of the children in these three groups. The points noted will be based on Physical changes including an idea of the height and weight of the child, activities the child will be interested in, the type of studying habits, the manner in which the child replies, the participation of the child in the classroom transactions, the reactions and emotions that a child shows to any incident that the teacher puts forward and the role of the parents and **siblings in the child's development.**

A good way to organise this is in the form of a table of the groups (from left to right) and characteristics (from top to bottom). Try and analyse the differences in the three groups and note the changes. You will see a pattern emerging as you go from one group to another.

Now consider your own classroom note the different characteristics of the students in relation to the above table. Write down your observations and **relate it further to every factor we explore as we go on further.**

Feedback

You may have tabulated and got your contents like the table given below. We have provided only some examples in case you were not sure as to what to do. We will compare and discuss the different ways in which different teachers have completed the table at the study group discussion.

Groups→ Characteristics↓	6-8(1 st std & 2 nd std) yrs	8-10 yrs(3 rd & 4 th Std)	10- 14 yrs(5 th & 6 th std)
Phy Changes(ht-wt.)			Between 4 to 5 ft Wt
Activity of interest	With peer group		Group and also interest in groups of opposite sex
Studying habits			
Manner of replying	Soft		Aggressive
Participation of the child in class	Active with interest to know		Passive and active, knows most of the contents
Reaction/emotions to a situation	Throws tantrums		Reacts aggressively or becomes silent
	Dependent		Independent

Role/interaction to parents			
Role/interaction to siblings			

You have noted that we have talked about child development and in that we also saw the growth and development of children. In the next unit we shall learn more about this aspect.

Content 2

Growth & Development

Development Activity

Referring back to the activity in content 1, complete the following additional activity.

This will take about 30 mins and it will help you to understand the factors affecting the growth and development of children. Once again tabulating your ideas will help you to see the different aspects of growth and development as a whole in children.

Make a note of the following based on your personal experience:

1. The role of parents, siblings, family, teachers, peer and **environment on the child's day to day activities.**
2. The factors that affect him in his physical growth, motor development, mental development, emotional development and social development.
3. How the teacher can play a role in moulding and developing the child's **adjustments in the 2nd point.**

Feedback

You **may** have come up with something like the following:

Role of ↓	Factors affecting →	Physically	Mentally	Emotionally	Socially
Parents		Food, nourishment	Values, information	Security, understanding	Childs accomplishments, ratings in class
Siblings			friendship brings sharing/caring, values	Satisfaction, security	Interaction, Mixing, acceptance
Family		Nourishment	Values		Comfort levels
Teachers		Planning activities of level of child	Able to do	Role of Group formation	Interaction with the group
Peer		Growing together	Sharing, extrovert behaviour	Adjustments , self satisfaction adjustments	
Environment		Play, space		Helps all types of groups	

We have now seen that the child's growth and development is influenced by family, school, community and society at large. In the next section we will discuss the role of these including media on the child's growth and development.

Content 3

The family, teacher, society and the media on the growth and development of the child

Development Activity

From the activity in content 2 we can analyse how a child is affected by family teacher and society.

Lets us put down some important points of the role of family, teacher and society in the growth and development of the child.

You are given an activity below in which you have to match the answers and check with the points you have noted above on these roles.

Now we shall proceed with another activity based on your experiences of children. We all know that TELEVISION and MEDIA have become important in the children's daily life. This medium has slowly gained importance in society as a means of education

Think and answer the following questions:

1. Has media in the form of print, television etc played any signifacnt role in the life of a child whom you know?
2. How much time is too much for a child to be engaged with mass media?
3. What are the things that have the greatest effect on the child?
4. How is the effect of the answers in Q3 seen in the child?
5. What are the positive, negative and comfortable programmes shown/ depicted by media?
6. What care must be taken while planning **articles/ events via the media**”
7. How can these help in the growth and development of the child?

Feedback:

Possible answers to the above questions are as follows:

1. Yes media is important in the life of a child.
2. More than 5 hrs
3. Serial.....
- 4.
- 5.
6. Educational.....
7. ...

Consolidation Activity

This activity allows you to demonstrate that you have achieved the outcomes or objectives stated at the beginning of the unit.

Fill in the blanks provided below with the answers you think are appropriate and closest to a child's growth and development

A set of open ended statements on the concept of growth, stages of growth, development, behaviour, reactions to programmes/ event shown will be given. A number of points which could form appropriate answers will be given at the end.

Summary

From the above activities we learned

- what the concept of child development is all about,
- what are the stages and the development that in general will be taking place in a child
- the role of the teacher in this growth and development
- the role of media in the development of the child.

Conclusion

We can now see the importance of understanding a child right from his entry into school till he reaches adolescence including his growth and development and the factors affecting his development right from his home to school to environment.

As we move further from this unit we shall try to understand in detail about the physical and psychomotor development in child and then move on further to study the other aspects of growth and development.

Dr Jessie Modi
Dr Archana
Rachana Thrivedi

Demonstrating appropriate integration of media, a conversational style and attention to sequential progression

- ◆ Prof Rajkamal Sheromani
- ◆ Dr. Subodh kumar Jha
- ◆ Surya Kumar Jha
- ◆ Dr. Rachna Tripathy
- ◆ Emteyaz Alam

-
- ◆ Paper & code: English Language Teaching

- ◆ Semester: One
 - ◆ Module: F-5, Unit 4 (Listening & Speaking)
 - ◆ Unit title: Sound System of English
 - ◆ Sub-unit: Pronunciation of certain English consonant sounds causing unintelligibility
 - ◆ Time allocation: 120 minutes
-

Introduction

- ◆ Purpose: The purpose of this subunit is to help you learn the articulation of certain English consonant sounds that often impair understanding when conversing in English. You have been learning and practicing English sounds in different ways whereas it needs to be learnt and practiced in a standard and acceptable manner.
 - ◆ **Can you identify a situation where your English has not been understood properly by standard users of English and assign reasons for the same?**
-

Learning outcomes

- ◆ At the end of the lesson you would be able to identify the reasons for the unintelligibility of the kind of English that you speak.
 - ◆ You would also be able to use and practice those consonant sounds which may cause problems to you because of your mother-tongue pulls.
-

Introductory activity

- ◆ You have been learning to speak English for a pretty long time now but may still feel difficulty in the articulation of certain consonant sounds in English mainly because these sounds in English are not there or not pronounced like English in your mother-tongues. But you have not to worry. You can try to acquire these sounds by constant and continuous practice so that you would never feel embarrassed. Your challenge is much greater because you have to prepare a new generation and teach, and model to your pupils, the correct pronunciation of the sounds in words that are listed for practice in the next slide.
-

Practice of certain consonant sounds posing problems to speakers from the Hindi belt

- ◆ **1. Listen to the words carefully and write them. Each word will be pronounced twice only:**
- ◆ Fine, five
- ◆ vine, wine
- ◆ this, that
- ◆ these, those
- ◆ sit, seat

- ◆ ship, sheep
 - ◆ measure, pleasure
 - ◆ jump, judge
 - ◆ zoo, zero
-

Sound practice continued...

- ◆ 2. Listen to some more words having the sounds that you have already practiced:
 - ◆ father, tough, fight, laugh
 - ◆ very, vintage, vehicle, valid
 - ◆ thanks, thought, earth, thirst
 - ◆ this, there, that, with
 - ◆ sea, sip, city, seek
 - ◆ sugar, issue, station, show
 - ◆ John, July, jail, jolly
 - ◆ zoo, roses, is, zebra
-

- ◆ Listen to these words again and again. Try recording yourself speaking (perhaps using your mobile phone). Compare your pronunciation with that on the example provided.
 - ◆ (This activity needs ICT support. Recorded audio/video may be made available to teacher pupils for practice along with a device to record their pronunciation. Repeated practice will definitely give them enough opportunity to identify their errors and keep on improving their pronunciation)
-

Feedback

- ◆ The teacher educator will then listen to each teacher pupil and point out the errors made by them. Based on their major areas of problem, the teacher educator can give them more and more words or minimal pairs and even give them a few tongue twisters like:
 - ◆ She sells sea shells at the sea shore.
 - ◆ Note: Once practiced individually and in a study centre session, the activities could be replicated in the classroom.
-

Feedback for facilitators

- ◆ By now you must have realized that the wrong pronunciation of English sounds can cause a lot of problems. This happens more because there is no one to one relationship between the spelling and the pronunciation in English. As compared to 26 letters in the English alphabet, there are as many as 44 sounds in English. There are no letters to differentiate the short and the long vowels in English and one letter can represent different sounds and one sound can be produced with the help of different letters. So as teacher educators you must be very very careful in your speech and try to acquire the sounds of English in the right perspective.
-

Next activity

- ◆ In your **next activity** class you will be given practice in the correct pronunciation of the **12 pure vowel sounds** in English. The wrong pronunciation of the vowel sounds in words like back, hat, pen, lip, leap, full, fool, cot, caught, ago, about etc. may create the problem of intelligibility.
-

Content 1

- ◆ **Listen to the conversation** between Andrew (a native speaker) and Rajiv (a Bihari guide). Andrew came to visit Bodh Gaya. There he met Rajiv, a local guide. Here is a conversation between the two. They talked for a pretty long time but they failed to understand several points.
 - ◆ Andrew alights from the bus, looks around and comes to Rajiv.
 - ◆ **Andrew: Hello, I'm Andrew.**
 - ◆ **Rajiv: Hello, nice to meet you. I'm Rajiv. Where have you come from?**
 - ◆ Andrew: London. Can you show me the way to Buddha Temple?
 - ◆ Rajiv: Sure.
 - ◆ Andrew: pardon?
 - ◆ **Rajiv.: I mean I can show you the way. I'm a guide. Go straight till you get to grape vine.**
 - ◆ **Andrew: Grape wine? I don't take wine.**
-

Development activity

- ◆ Read/ Listen to their conversation and try to explain the reasons behind their misunderstanding.
-

Feedback

- ◆ The misunderstanding between Andrew and Rajiv due to different habits of pronunciation might have given you an idea that we must try to be very intelligible in our speech and learn to be as nearer to the standard variety of English as possible . It is true that our

pronunciation cannot be like the pronunciation of the native speakers of a language but we can be very close to the standard one if we practice properly.

Consolidation activity (at the study centre)

- ◆ An activity to be designed to consolidate what they have learnt in this unit, taking help of audio-visual aids. This will test their ability to listen and respond properly.
 - ◆ Students will be asked to **role play** a situation in which they will include sounds that usually pose problem to them.
-

- ◆ Summary
 - ◆ This unit has focused on the importance of the proper pronunciation of certain consonant sounds like the first sound in **father, very, shoe, zoo, Jane, thick, there, thought, wine, vine** and the last sound in words like **treasure, tough, rough** etc. which have been causing problems to you and which can be overcome by your conscious constant practice.
-

- ◆ Conclusion
 - ◆ **Building on your understanding** of components of listening (intensive and extensive) in sub unit 3, you have tried to understand the sound system of English – focussing on the proper articulation of sounds or words in this unit. Attempts were made in this unit to help you realize that wrong pronunciation of these consonant sounds badly affects the intelligibility and acceptability of your speech. **You must also have realized** that certain sounds are either not in your mother-tongues or the manner and place of the articulation of these sounds are not the same. As **we move further to the next sub unit**, you will have further activities regarding the proper pronunciation of the 20 vowel sounds- 12 pure vowel sounds and 8 diphthong sounds.
-

Example 3: Demonstrating the need to initiate a conversation that is rooted in authentic experience

Paper & Code: Mathematics F 7

Semester: one

Module: first.

Time Allocation: 60 minutes

Introduction

In your **daily life** you always come across number. How many members are in your family? How many fingers do you have? How many players are needed to form a football team? In answering such problems related to your day to day life, you must have felt the need of the knowledge of the numbers. Do you think some numbers are given by nature to us? If not, why are some type of numbers are known as natural numbers? In mathematics there are different types of number which makes the study of mathematics interesting. In fact mathematicians play with these numbers and going through this unit you will also be able to identify some type of numbers and will

be able to play with some numbers. The unit will help you know and locate place value of different digits in a particular number.

Knowledge of different type numbers, difference between whole number and a fraction number identification and distinction of different type and different forms of representing numbers will be certainly known to you. The purpose served by basic knowledge of the number will also make you interested to understand number systems.

Objectives or outcome

After completion of this unit you will be able to-

- Know assumptions based on the concept of number.
- Identify different notations to represent numbers.
- Form numbers of different digits
- Find the place value of a digit in the given number.
- Differentiate between whole numbers and fractions.
- Understand mathematical operations and their inter relationship.

Introductory Activity

Activity 1: Let us observe the numbers

(a) 123 (b) 312 (c) 231

1. What is the value of the digit 2 in the given numbers?
2. Can these numbers be expanded in view of the digits?
3. In which numbers is the place value of 2 at its maximum and minimum?

You can express the number 24 in its expanded form like

$$\begin{aligned}24 &= 20 + 4 \\ &= 2 \times 10 + 4 \times 1 \\ &= 2 \text{ tens and } 4 \text{ ones}\end{aligned}$$

Similarly

$$\begin{aligned}42 &= 40 + 2 \\ &= 4 \times 10 + 2 \times 1 \\ &= 4 \text{ tens and } 2 \text{ ones}\end{aligned}$$

You can also express the number 325 in its expanded form as

$$\begin{aligned}325 &= 300 + 20 + 5 \\ &= 3 \times 100 + 2 \times 10 + 5 \times 1 \\ &= 3 \text{ hundred , } 2 \text{ tens and } 5 \text{ ones.}\end{aligned}$$

$$\begin{aligned}532 &= 500 + 30 + 2 \\ &= 5 \times 100 + 3 \times 10 + 2 \times 1\end{aligned}$$

= 5 hundred , 3 tens and 2 ones

And $253 = 200 + 50 + 3$

= $2 \times 100 + 5 \times 10 + 3 \times 1$

= 2 hundred , 5 tens and 3 ones

You have observed the importance of place value of the digit in given numbers.

Feedback

You have learnt from the activity that the number has no absolute value: rather its value changes as per the change in place of the numbers.

Dr Radhe Raman Prasad

Dilip Kumar

Dr Rakesh Kumar

Demonstrating the ways in which a contact-based orientation could incorporate a shift towards an ICT-supported ODL model

Paper & Code: School Organisation F3

Semester: First

Module: Module 1

Unit Title: Understanding of school Organisation

Time Allocation: 120 min (two periods)

Introduction

This subunit will enable you to define School Organisation. You will be also able to explain structure and significance of School Organisation. You will be able to differentiate between effective and ineffective school organisations. You will be able to recognise inefficient school organisation.

We will also look at how to get students to **form a student's** parliament at the School but the central **question we want you to consider is "How are a school and family similar in decision making and coordination?"**

Learning Outcomes

- You will be able to present examples of effective school organisation from your local area.
- You will be empowered to incorporate the principles of effective school organisation in their own school.
- You will be able to justify the significance of effective school organisation in facilitating the teaching learning process.
- You will be able to realise the role of ICT in enhancing the school organisation (standards).

- You will be able to develop leadership qualities.

You will be able to develop decision making capacity.

Content 1: Concept and components of School Organisation

Meaning and Definition of School Organisation.

School Organisation is not a mere assemblance of human resources at the different levels rather a platform where group activities are promoted, co-ordinated and streamlined in the direction of a common goal.

In other words school organisation is a group of people striving to achieve a common goal for augmenting the democratic and constitutional ethos of justice, equality, liberty and fraternity in the teaching learning process.

Different components of School Organisation forming school structure.

Physical Components: The physical component comprises the basic infrastructure i.e. adequate ICT gadgets, ideal school building, furniture, science lab, language lab, Maths lab, play ground, play kit etc.

Human components: Headmaster, teachers, supporting staff, learners.

Other components: Community, Social and educational institutions.

Factors affecting School Organisation (staffing, teamwork, etc.).

As you have seen that the School Organisation is affected by so many factors, prominent among them are:

Demographic factors

Social factors

Economic factors

Communicative linkage with mentor institutions

Technological factors (ICT)

Educational awareness.

Introductory Activity

Objective: Identify effective school organisation.

Self-study activity

This activity will help you to prepare for the discussion that take place at the study centre.

You will need about 15 minutes and a pen and paper.

Think about your own school. Would you say it is an effective organisation?

Write down three factors that suggest to you that your school is effectively organised.

Write down three factors that suggest to you that the organisation of your school could be improved.

Steps [for a study centre group activity or it could be replicated as a peer group discussion in a large school]

In this activity we need you to form 5 groups among yourselves. Prepare a list of likes and dislikes of the school where you studied. Now summarise ten important points in two columns on single chart paper in two different colours.

Once complete, discuss among peers on the presentation to identify what you consider to be effective and what is not effective in terms of the organisation.

Feedback

As a class debate finalise the lists (Facilitator needs to guide this process so that a finalised list appears correctly).

Content 2

- Types of School Organisation.
- Role of School Organisation in facilitating teaching and learning.
- Significance of School Organisation.

Development Activity

A written passage will be supplied to each group. They will be requested to read carefully and discuss among the group whether the process adopted by the leader was democratic OR non-democratic and justify the answer with logical support.

Feedback

The facilitator and peers will discuss what **elements of each group's presentations** were effective and resolve any confusion. It is important to demonstrate a sound understanding of the factor selected. Now the facilitator will prepare an action plan for celebrating a farewell with the help of peers in a democratic way, seeking the opinion of each group member in order to justify the democratic approach of decision-making in school organisation.

This activity is best done in a study centre as it relies on a group and a facilitator. Many of the schools from which teachers will be drawn into this programme have only one or two teachers.

As preparation for the group discussion, the following activity could be included in the study materials for self-study.

Activity 1

This activity will help you to begin thinking about the nature of school organisation.

It should take you about 20 minutes to complete.

Read through the following checklist of “democratic” behaviours ...

Now read the following three case studies. Use the checklist to decide whether the leader’s behaviour in each case is democratic or not ...

Content 3: School community symbiosis

SEC, PTA, SMC, CO-RELATION WITH OTHER ORGANISATIONS

Introduction

As we have learnt in the last subunit, effective organisation depends on many factors. Apart from these there are some other organisations which have an impact on school organisation.

Consolidation Activity

Students will be divided into six groups as per the teaching points discussed earlier and a brief note will be presented by the two other members who did not participate earlier in order to make process participatory.

Summary

All the teaching points will be summarised by the teacher.

Again, the activity is best done at the study centre because of the reliance on group work and a lead teacher. The need to ensure the active participation of all study group members should be noted.

As preparation for the group discussion, the following activity could be included in the materials designed for self-study.

Activity 2

This activity will help you to begin thinking about the different factors that affect school organisation.

It should take you about 60 minutes to complete.

Read through the following 6 sets of factors affecting the organisation of schools ...

Assess the impact of each of these factors on your own school.

1. Write down which factors have helped to make the school more effective and explain how.
2. Write down which factors have caused the school to be less effective and explain how.

...

Note that the following definition flows from the discussion itself, rather than being presented up front as a given.

Definition: School Organisation is not a mere assemblance of human resources at the different levels rather a platform where group activities are promoted, co-ordinated and streamlined in the direction of common goal.

Factors

Demographic factors.

Social factors

Economic factors

Communicative linkage with mentor institutions

Technological factors (ICT)

Educational awareness

Human Resources

Physical Resources

Economic Resources

School Education Committee

Village Education Committee

Parent Teacher Association

School Management Committee

Co-Relation with other organisations

Self -Assessment

1. Prepare a photo album that illustrates various aspects of your school organisation.
2. If you were the H.M of your school how would you co-ordinate with the existing resources in order to get ideal school organisation?
3. Justify the need of school organisation in facilitating the teaching-learning process at school.
4. What will be the role of ICT in enhancing the working capacity of a School Organisation?

The latter

5. Justify the role of PTA in teaching learning and email it.

6. Prepare a note on the role of VEC in effective school organisation and mail it on my email id dheeraj.dhananjay99@gmail.com.

The last two tasks here represent examples of possible ICT integration. However, the email would need to be sent to the study centre facilitator because the course leader does not want to receive 40 000 emails from all the students taking this paper.

Conclusion

Folks, we started by discussing the family set up and then discussed the various aspects and compared it with school, comparing both as an organisation. We learnt about the different concrete aspects of school organisation like definition, types, components etc.

Consolidation Activity (At study centre)

A video of IIM Calcutta will be displayed and you will be requested to identify evidence of effective school organisation.

You will be requested to identify factors affecting school organisation.

Consolidation Activity (ICT Based)

Prepare a power point presentation on effective school organisation.

References

www.essex.gov.uk (for reference only)

Where possible we need to source content from OER. However, we can make reference to existing copyright reserved websites if they are not embedded in the course itself.

Participants:

Dr. Rita Roy

Dr. Ratna Ghosh

Dhananjay Dheeraj

Demonstrating the ways in which activities can be related to authentic real life experience

Unit: Concept of EVS

Sub-unit: Environmental studies- nature, scope, objectives and importance

Introduction

- Environmental studies deals with physical environment and social environment. It is the combination of both components and its inter-relationship. It is an applied science which deals with how human activities have impacted on the natural environment. It seeks

practical answers to the increasingly important question of how to make human civilization sustainable within **the earth's finite resources**. So it is very important for you to know about the nature, scope, objectives and importance of EVS.

- Stop and think: **What do you already know** about EVS and why it is necessary to know about the environment and the human social activities that affect it.

Learning outcomes

By the end of the sub-unit, you will be better able to:

- Describe the nature, scope, objective and importance of EVS
- Explain the relationship between the natural environment and the human activity that impacts on it.
- Discuss the exploitation of limited resources by human activity.
- Sensitise the children about the nature of the environment.

Nature of EVS

- Environmental studies deals with every issue that affects living organisms. It is essentially a multi-disciplinary approach in which science and social science are combined. The science deals with factors of the physical environment whereas social science deals with social, economic and geographic aspects.
- Stop and think: **What do you find in your surroundings?** List the things you see in your locality and categorise them in respect of physical, social and economic aspects.

Scope and importance of EVS

If you study the history of your area you would see your surroundings were originally a natural landscape, such as forest, rivers, mountain, and desert or grass land. Most of us live in landscapes which have been changed by human activities. We depend on nature and natural resources. Nowadays we are even more depending on the natural resources to fuel the industrial development and intensive agriculture that provides goods for our increasingly consumer oriented society. This uses up large amount of natural resources like water, minerals and petroleum products. These resources are limited. Our natural resources can be compared with money in a bank. If we use it rapidly, the capital will be reduced to zero. On the other hand, if we use only the interest, it can sustain use over the longer period of time. This is called sustainable utilization or development of resources.

Introductory activity

- This is a classroom-based activity.
- TASK---- Ask pupils to **list items of daily use** and find out the origins of the resources that make these items possible.

- How much water is used from morning to night? Ask pupils to calculate it with jug and balti and come next day with the information for their home. Then help them find out the consumption of water at family level and extrapolate to the population level of your area.
- Conduct a brainstorm in which pupils list the resources which are limited.
- Make 5-6 small groups of pupils in the classroom and give the task for thinking about the above-mentioned and writing findings in the form of a chart for group representation.
- We will discuss the task concerned, generalise the issues, identify solutions and document it all during the next group discussion session.

Feedback from the writer to promote self-reflection

Stop and think:

- What is the value of resources and what are their origin or source?
- Who uses resources most intensively and how?
- How can you conserve water and how it can ensure sustainable use?

Development activity

- This is a classroom-based activity.
- **TASK—Think of all the things that you do in a day. List these activities and identify the main resources that you use for each one.**
- Discuss the issues involved and possible solutions with your pupils and then help them document their findings.
- Bring the pupils' **work to the next study group discussion. We will compare how different schools and classrooms have completed the task and what they find out in the process.**

Feedback from the writer to promote self-reflection

Stop and think:

- How much energy do you use? How can you reduce your consumption?
- How can we reduce the use of limited sources of energy?

Consolidation activity (study centre)

Collect together all the work that has been done for the activities in this unit. Bring this work with you to the study centre. We will compare examples from different schools and discuss what worked well and what could be done better.

Your teacher trainer will show some film clips regarding landscapes in which no human activities have been done. You will then discuss what you have seen and the implications thereof.

Summary

- EVS deals with the physical environment and social environment i.e. social activities.
- The natural resources are limited.
- The meaning of sustainable use of resources is to use the resources in a balanced manner so that they last longer or can be replaced as quickly as we use them e.g. planting as many new trees as trees we cut down.

Self-assessment

Evaluate what you learned in this unit regarding:

- The content of EVS
- The process of teaching EVS.

Conclusion

The nature, scope and objective of EVS is concerned with the study of various components of environments having both physical and social activities.

[Demonstrating the use of ICT to develop ICT competences across the programme](#)

Example 5: Introduction to Computer

Paper & Code: ICT based Teaching Skills

Semester: First

Unit: 1 - Basic User

Sub Unit Title: Introduction to Computer

Time Allocation: 50 Minutes

Introduction

Computer is ubiquitous now-a-days. You must have seen it at a number of shops, Internet Cafes. Have you ever noticed that the screen you are looking at is not the whole of the computer system? This module will introduce you to the basic hardware structure of a computer. What are the names of major components of the computer? How is it set up with power supply and power back up?. Do you know how to start a computer?

Objectives:

At the end of the subunit you will be able to

- describe the process of starting a computer

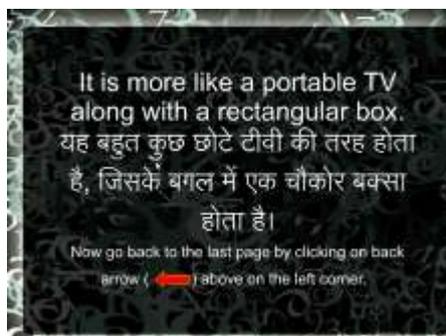
- visualise and identify the key components of power supply
- identify the alternative/back up mode of power supply
- identify the major hardware components of computer system.

Have You Seen a Computer?

Have you seen a computer? How can you describe it best? Wait think about the answer and write it down.

Feedback:

Click here to compare your answer. <a hyperlink to <http://www.pwcbcd.org/wp-content/uploads/2013/03/computerlikeatv.swf>> A snapshot below.



What about the wires? There are so many. What do they do? How can you make the box operational?

Introductory Activity: Locating the Starting Button of a Computer

This activity requires that the computer you are using is turned on. Ask the facilitator to help you if it is not on.

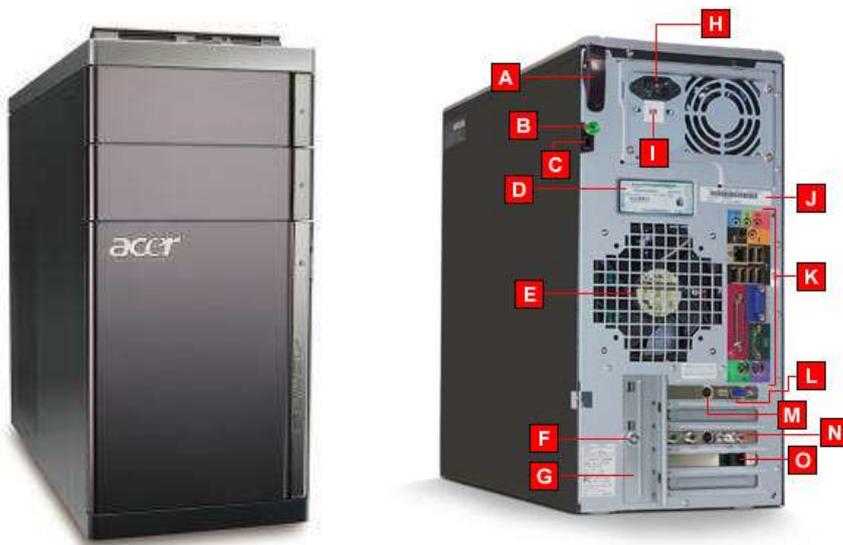


You are most likely sitting in front of a work station at the Study Centre. The main computer 'box' is the host PC to which your monitor and keyboard is attached. On the host PC look for the rectangular

box near the computer screen or on the floor. Check for the green or blue light. Find a push button around the source of light. The light may be coming from the button itself. This is the button to start the computer system.  It often has a symbol like this a hyperlink here will link to a website (http://www.introductiontocomputers.org/id2.html) which has a flash video that is an animated display of the position on the start button. > But wait! It has not always the same design. Many times the power button is hidden. When the computer is off, there will be no light from the power button and you may have to be intuitive to locate it.

Powering the Computer System

So how does the electricity come to this box? Find out how many minimum electric sockets are required to provide an electrical supply to a computer?



Which of the sockets depicted in the picture is for power. Select the correct alphabet letter.

Feedback from the writer

As you might have noticed that the start button is mostly in the facing edge of the box, but it may not be there also as the different companies may have different designs.

In terms of the power the answer to the above question is H.

Developmental Activity: Identification of the electricity supply system of a desktop

In order to do this activity you must have access to a computer. Look at the back of the computer screen that is in front of you.

All the sockets and connectors you can see on the back of the screen, as well as the mouse and keyboard draw their power from the host PC, which is the 'box' or 'tower case'. The computer screen you are looking at, needs AC power supply separately from the host PC. Hence two power sockets are needed to power up the host PC computer and its workstations.

But these are not directly plugged to Electric supply. To save the sensitive parts of the computer from electric fluctuations, another piece of equipment is needed, the UPS or Uninterrupted Power Supply. This device stops electrical spikes and also provides a small amount of power when the main supply fails. The diagram below shows a typical example.

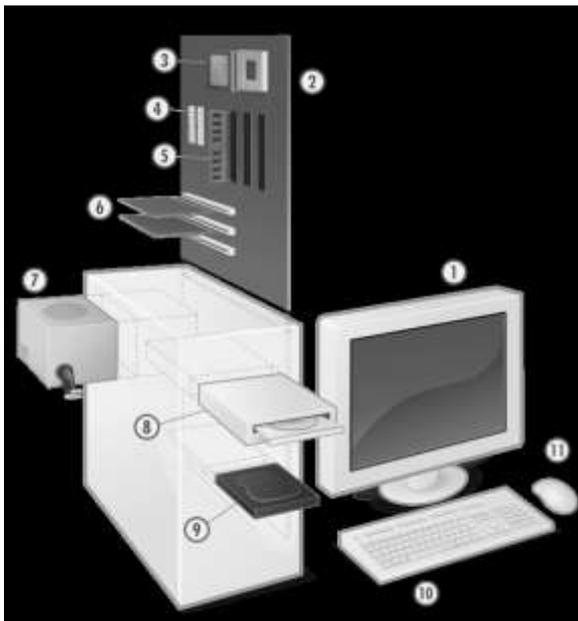


Test Your Knowledge

1. Use this online knowledge test to see if you have understood the content above. <a link to a [quiz](http://www.pwcbcd.org/wp-content/uploads/2013/03/test-your-knowlege1.swf) <http://www.pwcbcd.org/wp-content/uploads/2013/03/test-your-knowlege1.swf>>
2. **Find out how to start a laptop?** (A laptop is a mobile computer). Do we need a UPS to run a laptop?

Major Components of the Computer

Now you have seen some of the computer components. Can you identify the Host PC, UPS, Monitor, Keyboard and the Mouse? Let us explore some more <A link to the website http://plyojump.com/classes/hardware_components.php that gives details of the main parts of the computer hardware>.



1. Monitor
2. Mainboard or System Board
3. Central processing unit or CPU
4. Connectors for hard disks and CD/DVD readers
5. Electronic fast memory (RAM)
6. Additional circuit boards plugged in to add functions (e.g. a high-performance video card)
7. Power supply - fast computers use a LOT of electrical power
8. CD/DVD reader and writer
9. Internal hard drive
10. Keyboard
11. Mouse

Do you want to recall these names? Try out <A link to a quiz <http://www.pwcbed.org/wp-content/uploads/2013/03/computer-components.swf>>.

Activity: Names and Functions:

Match the two lists: The first is the names which you have already investigated. The second column is the functions that those components perform. See if you can match the two together correctly:

1	Monitor	A	Provides electricity
2	Mainboard or System Board	B	The brains of the computer where most calculations take place.
3	Central processing unit or CPU	C	data storage device used for storing and retrieving
4	Connectors for hard disks and CD/DVD readers	D	Connects crucial electronic components of the system
5	Electronic fast memory (RAM)	E	Displays the content of the computer
6	Additional circuit boards plugged in to add functions	F	Device that inputs words into the computer
7	Power supply - fast computers use a LOT of electrical power	G	Adds graphic cards and
8	CD/DVD reader and writer	H	An input pointing device
9	Internal hard drive	I	Memory
10	Keyboard	J	Connects hard disks and CD/DVD readers
11	Mouse	K	Write and read Compact Disk and DVD

Feedback

Answer goes here for activity above.

1.	E
2.	D
3.	B
4.	J
5.	I
6.	G
7.	A

8.	K
9.	C
10.	F
11.	H

Summary

Now you know the computer system is a group components. You understand that the host PC and other equipment need to be protected by UPS. You have identified the following equipment as well as identified their function:

- Monitor
- Mainboard or System Board
- Central processing unit or CPU
- Connectors for hard disks and CD/DVD readers
- Electronic fast memory (RAM)
- Additional circuit boards plugged in to add functions (e.g. a high-performance video card)
- Power supply - fast computers use a LOT of electrical power
- CD/DVD reader and writer
- Internal hard drive
- Keyboard
- Mouse

Conclusion

This is your first step in the world of ICT as the first thing every workman has to do is to know his tools. With this knowledge of computer you will move to the next unit where we will be discussing about the office automation software.

Contributors:

Prabhas Ranjan

Bibliography/useful references

- Ally, M. 2004. Foundations of educational theory for online learning. In Anderson, T. & Elloumi, F. (eds.) Theory and Practice of Online Learning, pp.3-31, Athabasca University, Athabasca.
- Anderson, T. 2008. The Theory and Practice of Online Learning, 2nd Ed. Athabasca University Press. ASEESA – Association for the Study of Evaluation in Education in South Africa
<http://www.aseesa-edu.co.za>. Accessed February 2006, August 2009 (note name change).
- BCCampus & Commonwealth of Learning. 2008. Education for a Digital World: Advice, Guidelines, and Effective Practice from Around the Globe. Vancouver: BCCampus & COL.
- Beets, P. & le Grange, L. 2005. 'Africanising' assessment practices: Does the notion of ubuntu hold any promise? South African Journal of Higher Education (SAJHE) 19 (Special Issue), 2005. 1197-1207.
- Bertram, C., Fotheringham, R. & Harley, K. 2000. Curriculum Studies. Pietermaritzburg: UNP.Coats, M. 1998. Assessment-as-learning: an outcomes-based approach. Keynote address to ASEESA conference, 28th September to 01 October, 1998, Johannesburg.
- Boskic, N., Starcher, K., Kelly, K. & Hapke, N. 11. Accessibility and Universal Design in BCCampus & Commonwealth of Learning. 2008. Education for a Digital World: Advice, Guidelines, and Effective Practice from Around the Globe. Vancouver: BCCampus & COL. 143-180.
- Bright, K. 2011. Providing individual written feedback on formative and summative assessments. <http://www.ukcle.ac.uk/resources/assessment/effectivefeedback.html>. Retrieved 30 August 2012.
- Brown, E. & Glover, C. 2006. Evaluating written feedback. In Bryan, C & Clegg, K. (Eds.), Innovative assessment in higher education (pp. 81-91). Abingdon: Routledge.
- Burke, D. 2009. Strategies for using feedback students bring to higher education. In Assessment and Evaluation in Higher education, Vol. 34 (1) pp. 41-50.
- Carl, A. E. 2009. Teacher empowerment through curriculum development – Theory into practice. Third Edition. Lansdowne, Cape Town: Juta and Company Limited.
- Chetwynd, F. & Dobbyn, C. (2011) Assessment, feedback and marketing guides in distance education. In Open Learning Vol. 26 (1) pp. 67 – 78.
- Clark, R. E. 1983. cited in Ally, M. 2004. Foundations of educational theory for online learning. In Anderson, T. & Elloumi, F. (eds.) Theory and Practice of Online Learning, pp.3-31, Athabasca University, Athabasca.
- Cole, S., Coats, M., & Lentell, H. (1986) Towards good teaching by correspondence. In Open Learning, Vol.1(1) pp. 16- 22.
- Commonwealth of Learning (COL). 2005. Creating learning materials for open and distance learning: a handbook for authors and instructional designers. Vancouver:COL downloaded from www.col.org 22/04/08.
- Council on Higher Education (CHE). 2004a. Enhancing the contribution of Distance Higher Education in South Africa: Report of an investigation led by the South African Institute for Distance Education. Pretoria: CHE.
- Council on Higher Education (CHE). 2004b. Criteria for Institutional Audits, Higher Education Quality Committee, June 2004. Pretoria: CHE.
- Council on Higher Education (CHE). 2004c. Criteria for Programme Accreditation, Higher Education Quality Committee, November 2004. Pretoria: CHE.

- Council on Higher Education (CHE). 2007. Higher Education Monitor No. 6, A Case for Improving Teaching and Learning in South African Higher Education, October 2007. Pretoria: CHE.
- Dede, C., Dieterle, E., Clarke, J., Ketelhut, D. J. & Nelson, B. 27 Media-Based Learning Styles in Moore, M. G. Ed. 2007. Handbook of Distance Education. Second Edition. New Jersey & London: Lawrence Erlbaum Associates, Publishers. 339-352
- Department of Education (DoE). 2003. Qualifications and Assessment Policy Framework, Grades 10-12 (General). Pretoria: DoE.
- Department of Education (DoE). 2005. The National Protocol on Assessment for Schools in the General and Further Education and Training Band (GR – G12). Pretoria: DoE.
- Freeman, R. & Lewis, R. 1998. Planning and Implementing Assessment. London: Kogan Page. 309 – 313.
- Furnborough, C. & Truman, M. 2009. Adult beginner distance language learner perceptions and use of assignment feedback. In *Distance Education*, Volume 30, No. 3 pp. 399 -418.
- Garrison, D.R. 1985. Three generations of technological innovation in distance education. In *Distance Education*, Vol. 6 (2), pp. 235-241.
- Garrison, D. R. & Vaughan, N. D. 2008. *Blended Learning in Higher Education. Framework, Principles and Guidelines*. San Francisco: John Wiley & Sons, Inc.
- Getzlaf, B., Perry, B., Toffner, G., Lamarche, K. and Edwards, M. 2009. Effective Instructor Feedback: Perceptions of Online Graduate Students. In *The Journal of Educators Online*, Volume 6 (2) pp. 1-21.
- Gravett, S. 2005. *Adult Learning: Designing and implementing learning events – A dialogic approach*. Second edition. Pretoria: Van Schaik Publishers.
- Gunawardena, C. N., Ortegano-Layne, L. Carabajal, K., Frechette, C., Lindemann, K. & Jennings, B. 2006. New Model, New Strategies: Instructional design for building online wisdom communities. *Distance Education*, 27(2), August 2006, pp 217 – 232.
- Hayland, F. 2001. Providing effective support: Investigating feedback to distance language learners. *Open Learning*, Vol. 16 (3), pp. 233- 247.
- Hismangol, M. & Hismangol, S. (2009) Providing feedback on student work in distance education in turkey: Practices and Recommendations. In *Turkish Online Journal of Distance Education*, Vol. 10(4) pp 1-10.
- Holmberg, B. 1989. cited in Anderson, T. 2004. Teaching in an online learning context. In Anderson, T. & Elloumi, F. (eds.) *Theory and Practice of Online Learning*, pp. 273-294, Athabasca University, Athabasca.
- Hummell, H. 2006. Feedback model to support designers of blended-learning courses. In *International Review of Research in Open and Distance Learning*, Vol. 7 (3), pp. 1-16.
- Illeris, K. 2008. Learning, Work and Competence Development. Paper delivered at INSETA, SAQA, UWC breakfast seminar, Diep in die Berg, 29/10/2008.
- Kelly, K. Authentic student assessment strategies for the online environment in *BCCampus & Commonwealth of Learning*. 2008. *Education for a Digital World: Advice, Guidelines, and Effective Practice from Around the Globe*. Vancouver: BCCampus & COL. 239-244.
- Kenyon, A., Kenyon, V., Mtaka, S. & Mappingana, M. 2000. Practising what we preach: Evolving an innovative, progressive continuous assessment procedure for a part-time in-service B Prim Ed degree course through distance education at Fort Hare in SAIDE 2000. *OLTDE: open learning through distance education*, 6(1): 16 – 18.
- Killen, R. 2000. *Teaching Strategies for Outcomes-based Education*. Lansdowne: Juta & Co. Ltd.
- Kinross, C. & McKenzie, T. (2009). Facilitating the learning of wildlife management ethics through online forum debate. *African Journal of Distance Education*, 1. 2009. 46-65.

- Koper, R. And Tattersall, C. Eds. 2005. Learning Design. A Handbook on Modelling and Delivering Networked Education and Training. Berlin and Heidelberg: Springer-Verlag.
- Lewis, R. 1981. How to Write Self Study Materials, Council for Educational Technology, UK. SAIDE Resource Centre.
- Lockwood, F. 1992. Activities in Self-Instructional Texts. London: Kogan Page.
- Lockwood, F. (Ed) 1994. Materials production in Open and Distance Learning. London: Kogan Page.
- Lockwood, F. 1995. Open and Distance Learning Today. London: Routledge.
- Maclellan, E. 2001. Assessment for learning: The differing perceptions of tutors and students. Assessment & Evaluation in Higher Education, Vol. 26 (4), 307 – 318.
- Maree, J. G. & Fraser, W. J. Eds. 2004. Outcomes-Based Assessment. Sandown: Heinemann.
- Mays, T. 2011. Developing practice: teaching teachers today for tomorrow. US-China Education Review, December 2011.
- Mays, T. 2012. Getting Practical: A guide to teaching and learning. 3rd Edition. Cape Town: OUP/Saide. (ISBN 978 0 19 905535 7) with Grosser and De Jager. Revision of first edition by Criticos, Long, Moletsane, Mthiyane and Gultig, Steilau (Eds).
- Merriam, S. B., Caffarella, R. S. & Baumgartner, L. M. 2007. Learning in Adulthood – A Comprehensive Guide. Third Edition. San Francisco: John Wiley & Sons. Inc.
- Moore, G. M. 1997. "Theory of transactional distance". In Keegan, D. (ed.) Theoretical principles of distance education. Routledge, pp22-38**
<http://www.aged.tamu.edu/research/readings/Distance/1997MooreTransDistance.pdf>
 [Accessed 15/07/2009].
- Morgan, C. & O'Reilly, M. 1999.** Assessing Open and Distance Learners. London: Kogan Page. 25 – 32, 219 – 220.
- Mothata, S., Van Niekerk, L. & Mays, T. 2003. Learner assessment in practice: Lessons from the NPDE in Perspectives in Education. Volume 21, Number 1, March 2003. 81-99.
- Nicol, D. 2008. Transforming assessment and feedback: Enhancing integration and empowerment in the first year: Quality Assurance Agency. Retrieved December 4, 2010: http://www.enhancementthemes.ac.uk/documents/First_Year_Transforming_Assess.pdf.
- O'Reilly, D. & Kelly, K. 14. Assessment and Evaluation in BCCampus & Commonwealth of Learning. 2008.** Education for a Digital World: Advice, Guidelines, and Effective Practice from Around the Globe. Vancouver: BCCampus & COL.
- Price, B. 1997. Defining quality student feedback in distance learning. In: Journal of Advanced Nursing. Vol. 26, pp. 154-160.
- Race, P. 2009. Designing assessment to improve Physical Science learning. Hull: Higher Education Academy.
- Raggatt, P. 1994. 'Outcomes and assessment in open and distance learning' in Lockwood, F. (Ed) 1994.** Materials production in Open and Distance Learning. London: Kogan Page. 137-145.
- Randell. C. 2006. Resources for new ways of learning: a manual for developers of learning resources. Pretoria:SAIDE. Downloaded from www.Saide.org.za, 06/07/2006.

- Rowntree, D. 1987. *Assessing Students: How shall we know them?* Second Edition. London: Kogan page. pp 1, 136.
- Rogers, A. 2002. Chapter 1: Learning and adult education in Harrison, R., Hanson, A., Reeve, F. & Clarke, J. 2002. *Supporting lifelong learning: volume 1 – perspectives on learning*. London & New York: Routledge-Falmer/UKOU. 8-24
- Rowntree, D. 1987. *Assessing Students: How shall we know them?* Second Edition. London: Kogan page. pp 1, 136
- Rowntree, D. 1990. *Teaching Through Self Instruction*. London: Kogan Page
- Schramm, W. 1977. *Big media, little media*. Beverley Hills, CA: Sage.
- Slattery, P. 2006. *Curriculum Development in the Postmodern Era*. Second Edition. New York/Abingdon:Routledge, Taylor & Francis Group, LLC.
- South African Institute for Distance Education (Saide). 1998. *Supporting Distance Learners: A Tutor's Guide*. Cape Town: Francolin Publishers.
- South African Institute for Distance Education (Saide). 2012. *Supporting Distance Learners*. <http://www.oerafrica.org/supportinglearners/Unit6/Givingconstructivefeedbackonassignments/tabid/1073/Default.aspx>. Accessed 14/11/12.
- South African Qualifications Authority (SAQA). 2005a. *Developing Learning Programmes for NQF-registered qualifications and unit standards – a step-by-step guide*. Pretoria: SAQA.
- South African Qualifications Authority (SAQA). 2005b. *Guidelines for integrated assessment*. Pretoria: SAQA.
- Vygotsky, L.S. 1978. cited in Hardman, J. 2005. Activity Theory as a framework for understanding teachers' perceptions of computer usage at a primary school level in South Africa. In *South African Journal of Education*, Vol. 25(4) pp.258–265.
- Walker, M. 2009. An investigation into written comments on assignments: Do students find them usable? In *Assessment & Evaluation in Higher Education*, Vol. 34 (1), pp. 67 -78.
- Welch, T. & Reed, Y. (Eds) 2005. *Designing and Delivering Distance Education: Quality Criteria and Case Studies from South Africa*. Johannesburg: NADEOSA.
- Williams, R., Karousou, R. & Mackness, J. (2011). Emergent learning and learning ecologies in Web 2.0. *The International Review of Research in Open and Distance Learning (IRRODL)*, 12 (3).39-59.
- Yorke, M. & Longden, B. 2008. *The first year experience of higher education in the UK (Phase2)*. Retrieved August 31, 2009: http://www.heacademy.ac.uk/news/detail/fye_final_report.