DEVELOPING CURRICULUM AND LEARNING RESOURCES:
Guidelines for effective practice

ABSTRACT
This document outlines a process for curriculum and learning resource development for effective mixed mode provision. It suggests three core stages of curriculum design, course design and learning resource development which are inter-related.
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Introduction
Increasingly, there is need to provide high quality learning opportunities without necessarily requiring teachers and learners always to be in the same place at the same time. For continuing professional development purposes, for example, people need to be able to learn and work at the same time. This gives rise to two key ways in which learning provision differs from contact-based provision of the kind offered by full-time colleges and universities:

- 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 examined.

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.

The assessment strategy is a critical part of the curriculum planning process. Of course it must provide evidence that the programme purpose is being met, but also, in a context in which there is limited face-to-face interaction, detailed and constructive feedback on assessment becomes a key teaching tool and an important means for helping learners pace themselves.
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.
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 2: The learning package

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.

The following table provides an overview of key design decisions made in respect of a continuing professional development programme for college educators.

<table>
<thead>
<tr>
<th>Foundational: Orientation: 20 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning and teaching approaches: 40 hours</td>
</tr>
<tr>
<td>2. Educational technology: 40 hours</td>
</tr>
<tr>
<td>3. Learning Resources: 40 hours</td>
</tr>
<tr>
<td>4. Special Education Needs/Inclusive Education: 40 hours</td>
</tr>
</tbody>
</table>

**All core modules**

| 220 hours |
| 20h prep; 20 weeks at 10h/week |

3 hours contact/7 hours self-study (7-10 pages)

2 semesters

**Figure 4: Curriculum design and time management**

It will be noted that there are three components to the programme – foundation, core and elective and that a deliberate attempt is made to cross-refer modules so that learners experience a coherent programme. Note also that the total learning time amounts to 220 hours. Because the target audience was working college lecturers, it was decided that this learning time needed to be spread over about 20 weeks.
Time management is very important for non-traditional students as most are working and learning at the same time. Note that the 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 2-3 modules only at a time (in the above example, this still involves completing 6 – 10 assignments) rather than taking all five modules at the same time.

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

1. Foundational (including orientation to the programme and its approach allowing prospective students to make an informed decision about whether the programme is right for them and making connections with what they already know and can do).
2. Core (raising issues and presenting concepts that cut across the programme and upon which more specialised learning can subsequently be built)
3. Elective (offered later so that: a) students can make more informed choices and b) core concepts and approaches can be applied in a particular contexts of interest).

This is summarised for the CPD programme referred to above in the following diagram.

**Figure 5: CPD programme overview**

We note from this diagram that students will take a total of 6 modules comprising $20 + 160 + 40 = 220$ hours of learning.
We also note the intent to have students develop a professional portfolio of practice that runs across the programme and carries two key messages:

1. All the components of the programme are inter-connected – it will not be possible to write an exam, pass a module and promptly forget everything that has been learned; and
2. The programme requires evidence of ‘practice’ – so the learning must be applied and not simply rote-learned.

**Curriculum learner support decisions**

As noted in the foregoing discussion, in the case of the CPD programme, we cannot simply take staff away from their work in order to learn.

The following curriculum design slides show the decisions made regarding the CPD programme used as an example and then the implications of these decisions for human and financial resourcing:

**Implementation model**

**Contact sessions**
- Weekly (5h) or fortnightly (6h)
- Orientation (including prior learning and experience and assessment)
- Maintenance (including modelling and assessment feedback)
- Consolidation (including portfolio)

**Staffing**
- Tutor time commitment would therefore amount to:
  - Orientation: 5 hours \((1\text{ prep } + 1 + 3)\)
  - Preparation, facilitation and reporting on contact sessions: 33 hours + 36 hours + 20 hours = \(119\) hours
  - Feedback on assignments: 30 TEs x 5 modules x 3 assignments x 0.5 hours = \(225\) hours
  - Portfolio assessment: 30 x 1 hour = \(30\) hours.
- 1 x 378h or 1 x 189h (core) + 4 x 47h (elective) for each cohort of 30 teacher-educators
**Implementation model**

*Production costs*

- Registration forms: 30 (digital?)
- Flashdrives: 30 (30 x N640 = N19 200)
- Orientation and core modules printed: 30
  
  (30 x 5 x N640 = N96 000)
- Elective modules: print on demand e.g. 7 + 7 + 8 + 8
  
  (30 x N640 = N19 200)

---

*Figure 6: Student support and the implications for human and financial resourcing*

It is also important to see the curriculum design decision-making as an iterative process and not a once-off event as illustrated in the following slide related to the CPD programme we are using as a case study.

---

**Implementation model**

*Monitoring and evaluation*

- Portfolios of professional practice
- Formal reviews of materials
- Participant evaluations
- Tutor reflections/reviews (individual and group)
- Videos of contact sessions/teacher-training sessions

*Feed into:*

- Programme and materials review and development
- Implications: need for review tools and instruments and M&E capacity (QA?)

---

*Figure 7: Curriculum design is continuous – we can always improve*
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. We must also make sure the assessment strategy requires evidence that students have fulfilled the purpose and achieved the learning outcomes of the programme as a whole.

We need a particular focus on assessment because assessment, learning and teaching are interrelated 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-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 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 Mapingana 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).

Flexible, part-time or distance provision has some different characteristics from more traditional contact-based tuition. What then are the implications for assessment when students spend 70% or more of their time working independently?

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 CPD programme?

![Figure 8: The overall assessment strategy](image)

As can be seen, at the programme design level, three major kinds of assessment task were identified to create a learning pathway from where we anticipate the average student will be at the start of the learning process to what they should be capable of by the end. There must be frequent opportunities for both self- and tutor-assessment and feedback in the process (and in a socio-constructivist model, also provision for student-student interaction and feedback).

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

In the case of the CPD programme, 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.

**Assessment for the Introduction to JSE module 2015**

<table>
<thead>
<tr>
<th>Formative assessment 1</th>
<th>Prepare the following for discussion during a contact session. Write a 200-word outline of the key changes of the curriculum review process in respect of JSE and articulate the main implications of these for our practice as teacher-educators.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formative assessment 2</td>
<td>Choose a topic from your own subject or discipline that you consider is generally not taught very well. Describe how this topic is traditionally taught in classrooms and then suggest how it could be taught better using some of the approaches explored in the Introduction to JSE module.</td>
</tr>
<tr>
<td>Summative assessment</td>
<td>Choose a concept that you need to teach your JSE student-teachers in the next week or two but which you know from experience they find hard to master. Plan a training session that reflects some of the strategies discussed in the Introduction to JSE module. Teach to your plan (or depart from it if necessary). Write up what worked and what did not and describe what you might do differently next time with reasons.</td>
</tr>
</tbody>
</table>

*Figure 9: Example of progression in demands of learning activities*

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 of which it is a part.

**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/subject matrix

<table>
<thead>
<tr>
<th>Title:</th>
<th>e.g. Learners and Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code:</td>
<td>e.g. LAL101A</td>
</tr>
<tr>
<td>Level:</td>
<td>e.g. 5 (first year)</td>
</tr>
<tr>
<td>Credits:</td>
<td>e.g. 12 (120 hours)</td>
</tr>
</tbody>
</table>

**Purpose:**

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:**

By the end of the module, student-teachers should be able to:

- 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

**Post to online discussion forum.**

- 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.

**Written assignment to be submitted online.**

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.**

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.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Core concept(s)</th>
<th>Key activity(ies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Everyday and school-learning</td>
<td>Blog</td>
</tr>
</tbody>
</table>
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 10, 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.

**Figure 11: A possible outline for the introduction to a module (see Appendix 1 for a full example)**
It is helpful for independent learning if resources following a similar format and design.

The example below, provides an example template that can be adapted for different modules and purposes.

Design of a unit of learning

Module & Course Code:

Semester:

Module name:

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

1) Item A
2) Item B
3) Item C
4) Item D

Introductory Activity

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

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**

**Feedback**

-----------------------------------------------------------------------------------------

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

-----------------------------------------------------------------------------------------

**Consolidation Activity**

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.

*Figure 12: A possible structure for a unit of learning*
In part-time/distance education provision, the supply of learning materials that encourage active student engagement with the content, even when students are separated from one another and from the teacher, is critical.

It is suggested that the activity-based nature of distance learning materials is possibly the most critical design feature (supported by appropriate user-friendly and gender-neutral language and examples) and that course developers should seek to design in a learning spiral as explained in the following Saide resource.

How People Learn: A Learning Spiral

SAIDE works within a constructivist framework of learning. This article provides a theoretical basis for the notion of a learning spiral designed into learning materials.

The Learning Paradox
The learning paradox is a recognition that the only basis on which you can learn something, in other words gain an understanding of something that was previously unfamiliar to you, is if you have some way of apprehending it. You can’t apprehend something new unless you already know something about it, but you don’t know anything about it until you have learned about it.

So to understand learning, we need to have some kind of theoretical account of how someone can come to a new understanding of something without already having knowledge of that thing. The question is ‘How is it possible for somebody to come to know something that they don’t already know?’

Dealing with the Learning Paradox
Over time different people have dealt with the paradox in different ways. The classical explanation comes from Plato writing about Socrates. His answer was that people are born with that knowledge. Using a questioning strategy, a Socratic teaching method, you can unleash that existing knowledge. You have to be a skilled questioner and tap into what people already know, challenging them in order to draw out what is in them.

Behaviourism

The opposite position is behaviourism. Behaviourists are interested in the conditions in the environment which lead to an increase in the frequency of a particular behaviour. Their answer to the paradox is to suggest that the way in which the paradox is set up is misleading. It shouldn’t be about the way people think. It should really be about what the conditions are that should be set up to produce these learnings. If you reinforce responses that look like the final outcome they will get stronger and stronger and that is how people come to know things.
Constructivism

Differently, constructivists are interested in the way that people engage in certain kinds of action that lead them to construct their own new knowledge. It becomes an active rather than a passive conception of knowledge. The constructivist answer to the question ‘How is it possible for somebody to come to know something that they don’t already know?’ is that people start engaging in actions related to something new, even, without understanding it.

Then if that action is facilitated or mediated in some way, the person will begin to understand and reflect on their own actions and in that way start to internalize their learning.

Constructivists argue that people don’t learn something by being told about it. They engage in a genuine activity once they start doing they reflect on what they do, think back about what they have done and learn something from it. That constructivist notion of learning can be thought of as a learning cycle or spiral. In the cycle of learning learners are given access to knowledge and new ideas, and guidance to think about what they did, whatever thoughts they had, or answer they gave, and why and how they came to have new ideas and new knowledge. Further new ideas and knowledge is then constructed within that same framework, along a learning pathway.

The learning spiral

We can see this visually in the following diagram:
Activity is not just doing something – thinking is also an activity. How do you think about something you don’t know? A thinking task takes you through a particular set of procedures which require you to focus your attention on particular concepts or issues and scaffold those in relation to what you already know, in relation to a new task or a new problem or new concept. That is what the design of a learning activity has to achieve. It is not just something new in a vacuum. We always respond to the world in relation to something we already know.

This is how people learn in any situation. So the concept of a learning cycle or spiral is not just about distance learning. The learning process is the same whether the guided reflection is immediate and face to face, or whether it is mediated through the materials.

In face to face tuition the learner and the teacher are able to have a conversation in which the teacher can respond very quickly in an ad hoc way to what the learner does or says and start to challenge and shift the conceptions that the learner is developing. In distance learning you, the writer, have to anticipate what the learner is likely to do and think and say. You cannot always anticipate correctly, but you can construct a set of activities that are likely to take that learner in the required direction in terms of the development; in other words in the direction of the learning pathway.

In a learning text, we know what is required to establish such a learning pathway. In the absence of a mediator (teacher), the text must take over the dialogic role of providing structured and systematic support to the learner as s/he moves from familiar activity (“the known”) to unfamiliar activity (“the unknown”). A designed learning text must consist of a series of learning activities, organised in a developmental sequence, which together require the learner to engage in thoughts and practices characteristic of what the course it trying to teach.

The question is, how does a piece of text substitute for what a teacher does? Think about it: in an ordinary learner-centred context (one in which activities that the learner engages in are set up as the basis on which learning occurs), a teacher is constantly giving feedback to learners on the ongoing outcomes of what they are doing – Is your answer to the question accurate and well-developed? Is the essay that you are writing well-argued? Is the solution you have developed to a geometry mathematically sound? Is your reading fluent and accurate? Etc. – and how they might improve their performance. When one writes a learning text, the idea is to construct feedback in such a way that the reflection encourages students to think critically about what they have done, and provide a framework against which students might be able to discover and reflect on mistakes they may have made. The materials become a mediator or educator.

The text can also help people to come to understand for themselves how they come to learn something new, for example by asking a question or by reading something new so that they are more aware that they can learn and they can take their own learning forward.

The populist notion of experiential learning is that if you have experienced something you have learned it. A good example is beading. Bead work has a complex set of skills in it and beaders probably do learn something while they are beading. But one does not reflect on an activity just by doing it. A reader doesn’t automatically ask questions about geometric patterning and sequencing. There may be an implicit notion of design, but it only becomes mathematics when there is deliberate, sustained and systematic reflection on those aspects. One of the main theorist of
experiential learning, David Kolb, says precisely that. That it only becomes experiential learning when there is a reflective component to it.

Let’s look at how the learning spiral can help us to design materials, whether for self-study purposes or for learning in face to face contexts, or for a combination of both - blended learning.

<table>
<thead>
<tr>
<th>Key elements in the learning spiral</th>
<th>Materials design features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content to frame activity</strong></td>
<td>As far as is possible, the content needs to be written as a statement of what we expect the learner to know already.</td>
</tr>
<tr>
<td>(Based one existing Knowledge &amp; experience)</td>
<td>At the beginning of the text, we will have to rely on our own understanding of the students’ prior learning in relation to the topic in question. However, as the text evolves, and we incrementally introduce new ideas, we will also be able to draw on and frame what we understand to be prior knowledge.</td>
</tr>
<tr>
<td></td>
<td>It is critical that, from the second activity onwards, that we build conceptually on what has been learnt in the previous activity/ies that we have designed. This activity-by-activity development is what is meant by a ‘learning pathway’.</td>
</tr>
<tr>
<td><strong>Learning activity</strong></td>
<td>The key point here is that we do not learn by simply being told something. We also do not learn by simply “having an experience” of something. When we listen to a good lecture, we can learn a lot, but only when we actively think about and reflect on what the speaker is saying. If the content of what is being said is not phrased in such a way as to engage with our prior knowledge, or if it is simply a restatement of what we already know, then we learn nothing. In both instances, this kind of lecture (or, designed learning texts) will only serve to bore us.</td>
</tr>
<tr>
<td>(reading, thinking, doing)</td>
<td>So the activity is the moment or episode in the learning process in which we actually acquire new understandings and new forms of knowledge – this is the pivotal notion in a constructivist approach to learning. This is why we talk about activity-based learning texts, and why the inclusion of developmentally-conceived activities in learning texts is a non-negotiable feature of the design and development of quality learning materials.</td>
</tr>
<tr>
<td><strong>Guided reflection/response to activity</strong></td>
<td>This is the point at which the text needs to operate as a teacher – it needs to anticipate the possible responses that learners may have come up with in relation to an activity, and provide them with an opportunity to reflect on what they have written in such a way as to allow them to learn from the actions (mental actions and others) that they have just engaged in. Obviously a sensitive teacher in a classroom does this all the time, but the trick here is to get the text to be able to do this in some way for the learner. You are not wanting</td>
</tr>
<tr>
<td>Key elements in the learning spiral</td>
<td>Materials design features</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>simply to give the right answer or to affirm any old thing that the learner may have produced – often, learners are wrong because they make mistakes or because they have a misunderstanding. Rather, what you want to do as a writer is to get the learner to think about what s/he has just done or said or written in a critical and reflective manner, and thus to be able to learn from it. There needs to be a deliberate structured reflection in relation to the task. The reflection helps to give a focus and to create the conditions for learning from own experience. That is why the reflection does not necessarily produce a right or a wrong answer. Instead, one is trying to is to put the learner in a position in which s/he thinks about whatever answer s/he gave and the reason for arriving at that answer. The learners are required to engage in meta-cognition to reflect on the activity. To simply provide the answer will not tell you whether the learner has learnt something or not. Some people think that even in activity based learning you have only learned when you are given the answer. The reflection cannot be the answer because the reflection is part of the activity. There may be cases where the conversation between different people in the activity is part of the learning process, and it may be helpful to give a kind of answer to clarify that the conversation was on the right track but that is still not the point of the reflection.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning pathway</th>
<th>Learning resource development</th>
</tr>
</thead>
<tbody>
<tr>
<td>(New knowledge/ideas leading to new activity)</td>
<td>As you move on in your writing, try to pull a question out of what has gone before. Try and identify an issue that will add new content or will deepen the understanding that the learners have built up so far. Of course, then, this will be introduced to set up the next learning activity which is conceptualised in terms of the learning pathway that you have planned.</td>
</tr>
</tbody>
</table>

**Figure 13: Designing and developing course materials: A distance education focus**

**Learning resource development**

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

In terms of learning design, a key indicator for successful learning 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.
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 guide when developing such resources.

**Key characteristics of effective 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.

**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 and learning management system resources reflect self-instructional principles.

**Table 1: Characteristics of distance education materials**

<table>
<thead>
<tr>
<th>Some differences between textbooks and DE materials</th>
<th>Textbooks</th>
<th>Self-instructional materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assume interest</td>
<td>Arouse interest</td>
<td></td>
</tr>
<tr>
<td>Written for teacher use</td>
<td>Written for learner use</td>
<td></td>
</tr>
<tr>
<td>No indication of study time</td>
<td>Give estimates of study time</td>
<td></td>
</tr>
<tr>
<td>Designed for a wide market</td>
<td>Designed for a particular audience</td>
<td></td>
</tr>
<tr>
<td>Rarely state aims and objectives</td>
<td>Always give aims and objectives</td>
<td></td>
</tr>
<tr>
<td>Usually one route through</td>
<td>May be many routes through</td>
<td></td>
</tr>
<tr>
<td>Structured for specialists</td>
<td>Structured according to needs of learner</td>
<td></td>
</tr>
<tr>
<td>Little or no self-assessment</td>
<td>Major emphasis on self-assessment</td>
<td></td>
</tr>
<tr>
<td>Seldom anticipate difficulties</td>
<td>Alert to potential difficulties</td>
<td></td>
</tr>
<tr>
<td>Occasionally offer summaries</td>
<td>Always offer summaries</td>
<td></td>
</tr>
</tbody>
</table>
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.

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. Often, 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 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>
<thead>
<tr>
<th>Impersonal style</th>
<th>Personal style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dense layout</td>
<td>More open layout</td>
</tr>
<tr>
<td>Readers views seldom sought</td>
<td>Learner evaluation always conducted</td>
</tr>
<tr>
<td>No study skills advice</td>
<td>Provide study skills advice</td>
</tr>
<tr>
<td>Can be read passively</td>
<td>Require active response</td>
</tr>
<tr>
<td>Aim at scholarly presentation</td>
<td>Aim at successful learning</td>
</tr>
</tbody>
</table>
### Table 2: Analysis of educational decision-making

<table>
<thead>
<tr>
<th>Analysis of educational decision-making</th>
<th>Communicating the curriculum</th>
<th>Engaging with the curriculum</th>
<th>Applying what has been learned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communicating the curriculum</strong></td>
<td>• Outcomes and content</td>
<td>• Assume that learners</td>
<td>• Assessment by tutors only.</td>
</tr>
<tr>
<td></td>
<td>finalised before programme.</td>
<td>have appropriate study</td>
<td>Assessment tasks require</td>
</tr>
<tr>
<td></td>
<td>Apply to all learners.</td>
<td>skills.</td>
<td>recall.</td>
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<td></td>
<td>All learners start and end</td>
<td>Learners expected to</td>
<td>Assessment tasks include</td>
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<tr>
<td></td>
<td>at the same time and</td>
<td>master content.</td>
<td>assignment content tests;</td>
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<td></td>
<td>follow the same study</td>
<td>Emphasis on recall in</td>
<td>examinations</td>
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<tr>
<td></td>
<td>sequence.</td>
<td>activities, assignments</td>
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<td></td>
<td>Emphasis on providing</td>
<td>and examinations.</td>
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<td></td>
<td>content through lectures/</td>
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<td>printed materials/ multi</td>
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<td>media/ ICTs.</td>
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<td></td>
<td>Use of generic tutorial</td>
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<td></td>
<td>letters offering assignment</td>
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<td></td>
<td>model answers/ provision of</td>
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<td></td>
<td>model answers to tasks.</td>
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<td></td>
<td>In-course activities few or</td>
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<td></td>
<td>used to consolidate</td>
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<td>memorisation on content.</td>
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<td></td>
<td>Tutor/materials developer</td>
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<td>seen as expert transmitting</td>
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<td></td>
<td>knowledge.</td>
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<tr>
<td></td>
<td>• Outcomes and content</td>
<td>• Enable reflection on</td>
<td>• Assessment by self</td>
</tr>
<tr>
<td></td>
<td>finalised before start but</td>
<td>and development of</td>
<td>and others.</td>
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<tr>
<td></td>
<td>programme offers core and</td>
<td>metacognitive skills.</td>
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<td></td>
<td>elective options.</td>
<td>Learners expected to</td>
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<td></td>
<td>Continuous enrolment, but</td>
<td>construct own understanding;</td>
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<td></td>
<td>same study sequence for all</td>
<td>therefore concern with both</td>
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<td></td>
<td>learners.</td>
<td>product and process.</td>
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<td></td>
<td>Emphasis on providing</td>
<td>Emphasis on problem</td>
<td>• Assessment tasks require</td>
</tr>
<tr>
<td></td>
<td>resources and scaffolding to</td>
<td>identification and problem</td>
<td>critical reflection and</td>
</tr>
<tr>
<td></td>
<td>enable learners to construct</td>
<td>solving in activities,</td>
<td>application in congruent</td>
</tr>
<tr>
<td></td>
<td>their own understandings,</td>
<td>assignments and examinations.</td>
<td>real-life contexts.</td>
</tr>
<tr>
<td></td>
<td>through tutorial in print;</td>
<td></td>
<td>• Variety of assessment tasks</td>
</tr>
<tr>
<td></td>
<td>1-1 contact tutorials,</td>
<td></td>
<td>including group tasks.</td>
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<tr>
<td></td>
<td>emails, teletutoring,</td>
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<td></td>
<td>internet.</td>
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<tr>
<td></td>
<td>• Emphasis on individual</td>
<td>• Enable reflection on</td>
<td></td>
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<td></td>
<td>formative feedback on</td>
<td>and development of</td>
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<td></td>
<td>assignments.</td>
<td>metacognitive and social</td>
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<td></td>
<td>In course activities</td>
<td>skills.</td>
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<td></td>
<td>require learners to construct</td>
<td>Learners expected to</td>
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<td></td>
<td>and demonstrate their own</td>
<td>co-construct knowledge</td>
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<tr>
<td></td>
<td>understanding.</td>
<td>with others therefore</td>
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<tr>
<td></td>
<td>Tutor/materials developer</td>
<td>emphasis on process.</td>
<td></td>
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<td></td>
<td>seen as scaffolding learning</td>
<td>• Emphasis on critical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>opportunities.</td>
<td>analysis and open-ended</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Outcomes and content</td>
<td>discussion.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>negotiated with learners</td>
<td></td>
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<td></td>
<td>before start of programme.</td>
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<td></td>
<td>Continuous enrolment and</td>
<td>• Assessment tasks require</td>
<td></td>
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<td></td>
<td>modularisation allows</td>
<td>critical reflection and</td>
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<td></td>
<td>multiple pathways.</td>
<td>application in congruent</td>
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<tr>
<td></td>
<td>• Emphasis on providing</td>
<td>real-life contexts.</td>
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</tr>
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<td></td>
<td>resources that reflect</td>
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<td></td>
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<td></td>
<td>multiple perspectives and</td>
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<td></td>
<td>inviting discussion in</td>
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<td></td>
<td>print, via email, via</td>
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<tr>
<td></td>
<td>website, in small group</td>
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<td></td>
<td>contact tutorials.</td>
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<td></td>
<td>• Emphasis on formative</td>
<td>• Assessment tasks require</td>
<td></td>
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<tr>
<td></td>
<td>feedback on both individual</td>
<td>critical reflection and</td>
<td></td>
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<td></td>
<td>and group tasks; feedback as</td>
<td>application in congruent</td>
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<td></td>
<td>continuation of discussion.</td>
<td>real-life contexts.</td>
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<td></td>
<td>In course activities</td>
<td>• Variety of assessment tasks</td>
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<td></td>
<td>favour discussion with others</td>
<td>including group tasks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and examination of multiple</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>viewpoints.</td>
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</tr>
</tbody>
</table>

**Engaging with the curriculum**
- Assume that learners have appropriate study skills.
- Learners expected to master content.
- Emphasis on recall in activities, assignments and examinations.

**Applying what has been learned**
- Assessment by tutors only.
- Assessment tasks require recall.
- Assessment tasks include assignment content tests; examinations
- Assessment by self and others.
- Assessment tasks require application of knowledge to authentic situations.
- Variety of individual assessment tasks, including portfolios.
- 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

<table>
<thead>
<tr>
<th>Typical resources</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Single prescribed textbook</td>
<td></td>
</tr>
<tr>
<td>• Prescribed and recommended mixed resources; with intent to set up debates</td>
<td></td>
</tr>
<tr>
<td>• No limits on resources consulted including idiosyncratic resources and resources co-constructed as part of the learning process</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from: Mays 2015

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 cognitivist and 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 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 course developer 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 the 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/text-based material. The setting of learning outcomes and the inclusion of summaries are an important part of this ongoing dialogue.

<table>
<thead>
<tr>
<th>Table 3: Examples of dialogue in printed/text-based materials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dialogue in printed/text-based materials</strong></td>
</tr>
<tr>
<td><strong>Function</strong></td>
</tr>
<tr>
<td>Indicating what the learner should be able to do before tackling a particular project</td>
</tr>
</tbody>
</table>

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## Dialogue in printed/text-based materials

<table>
<thead>
<tr>
<th>Function</th>
<th>Classroom talk</th>
<th>Textual dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stating what should be learned from a particular section</td>
<td>‘This section deals with vertebrates. When you’ve finished it you should be able to list four main characteristics...’</td>
<td>By the end of this unit, you should be able to: discuss the use of dialogue in DE course materials...</td>
</tr>
<tr>
<td>Practising so that the learners can see whether or not they have successfully achieved the outcomes</td>
<td>‘OK. Now answer the questions on the sheet I’ve given you...’</td>
<td>This activity should help you to... Answer each of the questions in the spaces provided... Suggested answers can be found on page...</td>
</tr>
<tr>
<td>Feedback on the learner’s performance</td>
<td>‘I’ll hand back the essays you did last week...’</td>
<td>In answering the question you may have thought of the following points... This assignment was well done and I like... but you could have...</td>
</tr>
<tr>
<td>Motivation and stimulation</td>
<td>‘It’s tough going but it’s worth struggling over, and it gets easier later on...’</td>
<td>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...</td>
</tr>
<tr>
<td>Unpacking the often difficult language of the textbook so that it makes sense to the student</td>
<td>‘What it means is this...’</td>
<td>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...</td>
</tr>
<tr>
<td>Relating concepts to the learner’s experience...</td>
<td>‘You know when you cut your finger...’</td>
<td>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?</td>
</tr>
</tbody>
</table>

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 verve-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).

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 develop 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.

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.
Perhaps, the most important characteristic of independent 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 therefore close this manual with a more in-depth discussion about learning activities and feedback.

**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 learning materials, activities that are written and summative only. However, to support independent 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)

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Discussion</th>
<th>Group work</th>
<th>Self-activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Class lecture</td>
<td>• Free group discussion</td>
<td>• Horseshoe groups</td>
<td>• Play</td>
</tr>
<tr>
<td>• Speech</td>
<td>• Controlled class discussion</td>
<td>• Round-table groups</td>
<td>• Project work</td>
</tr>
<tr>
<td>• Paper</td>
<td>• Forum</td>
<td>• Syndicates</td>
<td>• Activity cards</td>
</tr>
<tr>
<td>• Story</td>
<td></td>
<td>• Buzz groups</td>
<td>• Learning contracts</td>
</tr>
<tr>
<td>• Demonstration</td>
<td></td>
<td>• Brainstorming</td>
<td>• Self-study models</td>
</tr>
<tr>
<td>• Symposium</td>
<td></td>
<td>• Nominal group method</td>
<td>• Programmed learning</td>
</tr>
<tr>
<td>• Panel</td>
<td></td>
<td>• Fishbowl</td>
<td>• Teaching machines</td>
</tr>
</tbody>
</table>

In materials, we might design activities that guide students towards engaging with print, audio, video or multimedia resources.

In part-time/distance learning, we might use contact sessions, audio or video-conferencing or online forums to facilitate this kind of interaction.

In part-time/distance education, we might build group work into contact sessions or by using various kinds of online tools such as wikis to enable more collaborative learning.

In part-time/distance education, we need to think carefully about how we scaffold activities and feedback to support different kinds of independent study.

Experiential learning

• Simulation
• Dramatisation
• Role play
• Socio-drama
• Case studies
• Advanced learning programme
• Laboratory learning
• Sensitivity training

In part-time/distance education, we need to think about how we might use ICTs to support these kinds of learning experiences: for example, simulations, virtual reality gaming etc.

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 text-based 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 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.*

<table>
<thead>
<tr>
<th>Planning:</th>
<th>Writing:</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Make sure that you work within your module outline.</td>
<td>• Start writing draft one according to the activity format.</td>
<td>• Plan the layout of your activity/activities.</td>
</tr>
<tr>
<td>• Brainstorm activities for a selected section/unit of a module.</td>
<td>• Discuss first draft, evaluate, revise.</td>
<td>• Use scissors, glue, pastel coloured paper to do the layout of your activity/activities.</td>
</tr>
<tr>
<td>• Select one or two promising activities.</td>
<td>• Complete ‘presentation’ draft.</td>
<td></td>
</tr>
<tr>
<td>• Answer questions in preparation for writing the learning activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Use the activity format to plan the activity/activities.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 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 sources. 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 (Blooms 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, 2003
Support learners
Research has shown that learners do not attempt activities if they are unclear about what to do and have insufficient background knowledge. Learners need adequate support in the form of clear and unambiguous explanations and guidelines including illustrative examples where necessary.

- Detailed step-by-step instructions are provided for each activity and evaluative exercise. Clear instructions help the learners to know exactly what they are expected to do
- Guidelines for submitting outputs of activities are provided
- The number of activities/assignments and their due dates are reasonable and do not overload the student
- Learners are encouraged to interact with others and engage in collaborative information sharing.

Provide feedback
Feedback is an integral part of the learning process. Appropriate feedback and commentary on activities enables the learner to experience a form of interaction and discussion that normally takes place in lively classrooms. In addition, 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.

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

Online features
The online learning environment offers a variety of features, which when integrated provide learners with flexible, diverse and supported learning experiences. The main features are:

- Access to a range of resources both embedded and through hyperlinks to resources on other relevant websites.
- Ease of updating resources and keeping them current.
- Inclusion of online resources that cater for different learning preferences. It is possible to include text, video, sound, interactive games and activities, real time or synchronous and off line or asynchronous learning activities.
- Reliable and valid online assessment which is easy to use, is responsive and provides speedy feedback. Learners can upload their assignments and key assessment tasks.
- Communication processes such as discussion forums, blogs, emails make it possible for two way communication both synchronous and asynchronous between learners and tutors and between peers.

- Appropriate use is made of online technology tools to create an interactive learning environment which is suitable for the level of the course and the target group
- Clear navigation structures are in place with clear directions to learners.
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:
- Short motivational introduction (WHY is this activity important and worth doing)
- Clear description of task and instructions (WHAT do you have to do)
- Guidelines (HOW can you approach this task)
- Time allocated
- 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

<table>
<thead>
<tr>
<th>Activities building comprehension</th>
<th>Activities building critical thinking</th>
<th>Activities building skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer marked quizzes</td>
<td>Online research</td>
<td>Simulations, role plays (online)</td>
</tr>
<tr>
<td>• Short answers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• True/False or Yes/No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Multiple choice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video reflections</td>
<td>Case studies</td>
<td>Demonstration and practice</td>
</tr>
<tr>
<td>Webquests</td>
<td>Problem based learning</td>
<td>Games</td>
</tr>
<tr>
<td>Matching and sequencing</td>
<td>Decision making trees</td>
<td>Projects</td>
</tr>
<tr>
<td>Drag and drop</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Activities building comprehension

<table>
<thead>
<tr>
<th>Activities building comprehension</th>
<th>Activities building critical thinking</th>
<th>Activities building skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloze</td>
<td>Webquests</td>
<td>Peer to peer collaboration and communication</td>
</tr>
<tr>
<td>Label and identify diagrams</td>
<td></td>
<td>Chat sessions</td>
</tr>
<tr>
<td>Scavenger hunts</td>
<td></td>
<td>Blogs</td>
</tr>
</tbody>
</table>

Activities building skill

- 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

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit/module/course and website</th>
<th>CC licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>Unit: Copyright: Your educational right to copy</td>
<td>CC-BY</td>
</tr>
</tbody>
</table>
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.

Open Content Licensing 4 Educators Workshop on the WikiEducator website
http://wikieducator.org/Copyright_for_Educators/Introduction

Example 2: Complex quiz for multiple uses

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit module/course and website</th>
<th>CC licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Good academic practices quiz is offered at two levels: • Introductory level • Advanced level This allows for learners of different entry levels to engage with the module. Students are encouraged to try the quiz at the start of the module to test their entry awareness of good academic practices. 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. A variety of question options are used and effective use is made of supportive feedback that strengthens insight and comprehension and is motivating.</td>
<td>Unit: Developing Good Academic practices (DGAP_1) Introductory level OpenLearn, Open University UK <a href="http://openlearn.open.ac.uk/mod/oucontent/view.php?id=399993&amp;direct=1">http://openlearn.open.ac.uk/mod/oucontent/view.php?id=399993&amp;direct=1</a></td>
<td>CC-BY NC SA</td>
</tr>
</tbody>
</table>

Unit outcomes
This resource will provide:
• 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.

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

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit/module/course and website</th>
<th>OER licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video 1: Building on the past to shape the future</td>
<td>Unit: Creative Commons Unplugged</td>
<td>CC-BY</td>
</tr>
<tr>
<td>This is a short video clip used to introduce Creative Commons Licences. Participants are asked to answer two questions after viewing the video:</td>
<td>Open Content Licensing 4 Educators Workshop on the WikiEducator website <a href="http://moodle.wikieducator.org/mod/page/view.php?id=257">http://moodle.wikieducator.org/mod/page/view.php?id=257</a></td>
<td></td>
</tr>
<tr>
<td>• What was the most important message of the video for you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Did you learn anything new?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learners post their thoughts in a microblog, e.g. twitter or Wenote.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Unit outcomes
- 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.

### Example 2: Video to reflect on and consolidate new knowledge

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit/module/course and website</th>
<th>OER licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video: Wanna work together?</td>
<td>Unit: Creative Commons Unplugged</td>
<td>CC-BY</td>
</tr>
<tr>
<td>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.</td>
<td>Open Content Licensing 4 Educators Workshop on the WikiEducator website <a href="http://moodle.wikieducator.org/mod/page/view.php?id=257">http://moodle.wikieducator.org/mod/page/view.php?id=257</a></td>
<td></td>
</tr>
</tbody>
</table>

#### Unit outcomes

### 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

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit/module/course and website</th>
<th>OER licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 4: What is available for me to use?</td>
<td>Unit: Creating Open Educational Resources <em>OER 1</em> Intermediate level</td>
<td>CC-BY NC SA</td>
</tr>
<tr>
<td>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.</td>
<td>OpenLearn, Open University <a href="http://openlearn.open.ac.uk/mod/oucontent/view.php?id=397777&amp;section=4.1">http://openlearn.open.ac.uk/mod/oucontent/view.php?id=397777&amp;section=4.1</a></td>
<td></td>
</tr>
<tr>
<td>Learners are advised to look at and record the CC licences as they will determine how the resources can be used. The repositories listed in the activity are: Music</td>
<td><strong>(ccMixter)</strong></td>
<td></td>
</tr>
<tr>
<td>Multi-media resources across a range of topics</td>
<td><strong>Merlot</strong></td>
<td></td>
</tr>
<tr>
<td>Images</td>
<td><strong>Flickr</strong></td>
<td></td>
</tr>
<tr>
<td>A wiki of general repositories hosted by UNESCO</td>
<td><strong>UNESCO Open Educational Resources</strong></td>
<td></td>
</tr>
<tr>
<td>Jorum – a sharing site for Higher Education in the UK</td>
<td><strong>Jorum</strong></td>
<td></td>
</tr>
<tr>
<td>OER Commons</td>
<td>This site has a range of open resources</td>
<td><strong>OER Commons</strong></td>
</tr>
<tr>
<td>Science</td>
<td><strong>Science Repositories</strong></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td><strong>Humanities Repositories</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Unit outcomes</strong></td>
<td>After studying this unit you will:</td>
<td></td>
</tr>
<tr>
<td>• be able to state your own motivation for producing self-study Open Educational Resources (OERs);</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• have investigated and analysed some of the research into online learning;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• <strong>have evaluated some examples of educational resources for active open learning</strong>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• be able to plan a structured learning experience using a range of resources;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• be able to construct an Open Learn-style unit by remixing resources;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• have considered how to evaluate your teaching resource</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit/module/course and website</th>
<th>OER licence</th>
</tr>
</thead>
</table>
| **Activity 5: Learning from a story (Case study 1)**  
This story operates at two levels. It is both a personal story and an historical account of childcare policy and practice in the last century, from someone on the receiving end.  
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.  
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.  
Feedback can be accessed by clicking on the **Reveal Discussion** button. | **Introducing Social Work Practice K113_1 Introductory level**  
OpenLearn, Open University UK  
http://openlearn.open.ac.uk/mod/oucontent/view.php?id=398072&section=3.3 | CC-BY NC SA |

**Unit outcomes**
- 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.

**Example 2: Audio case study to stimulate critical reflection**

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit/module/course and website</th>
<th>OER licence</th>
</tr>
</thead>
</table>
| **Activity 3: Biographical perspective using pathways (Audio clip 1: John)**  
This is one of 4 audio clips of interviews with 4 homeless people. The audio clips give a brief | **Unit: Homelessness and need K202_3 Intermediate level** | CC-BY NC SA |
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.

The tasks involve:
- 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

A commentary on the audio clips can be accessed in Section 8.

OpenLearn, Open University UK

Unit outcomes
- understand how some of the needs of homeless people can be met.

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

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit/module/course and website</th>
<th>OER licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web searching demonstration videos and practice activities:</td>
<td>Tutorial: Web searching</td>
<td>CC-unclear</td>
</tr>
<tr>
<td>- Search preparation activity. Learners download a template into which they can type their responses.</td>
<td>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. SAIDE, OER Africa</td>
<td></td>
</tr>
</tbody>
</table>
The online activities are inserted into the learning text and learners are able to practice the search skills immediately after each video demonstration.

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

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit/module/course and website</th>
<th>OER licence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity 3 Writing a longer summary</strong>&lt;br&gt;This is a practical activity that requires learners to compare two summary versions of an original text about HIV/AIDS.&lt;br&gt;Learners identify the version they think best uses the 5R’s (reduce, reject, reword, reproduce, repackage) and summary organization.&lt;br&gt;They can type their reasons for selecting the best summary inside a typing block included in the highlighted activity space.&lt;br&gt;They can click on save and reveal answer. The feedback appears and learners can compare their answer with the one provided.</td>
<td><strong>Unit:</strong> Summarising text L185_3 Introductory&lt;br&gt;OpenLearn&lt;br&gt;Open University&lt;br&gt;<a href="http://openlearn.open.ac.uk/mod/oucontent/view.php?id=401419&amp;section=2">http://openlearn.open.ac.uk/mod/oucontent/view.php?id=401419&amp;section=2</a></td>
<td>CC-BY NC SA</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Name of unit/module/course and website</th>
<th>OER licence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remix game</strong></td>
<td>Unit: Creative Commons Unplugged</td>
<td>CC-BY</td>
</tr>
<tr>
<td>The game challenges the player to consider a number of remix scenarios to explore license compatibility.</td>
<td>Open Content Licensing 4 Educators Workshop on the WikiEducator website</td>
<td><a href="http://moodle.wikieducator.org/mod/page/view.php?id=257">http://moodle.wikieducator.org/mod/page/view.php?id=257</a></td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test knowledge about remix of Creative Commons Licences</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>How it works</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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. 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.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Feedback**

Traditionally, distance education provision in particular 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 including 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.
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 networking 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 learning

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

20.4 Comment on accuracy in calculation of marks.

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 distance and on-line learning provision.

**Integrating media and technology**

One of the outcomes of the NCCE curriculum reform 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 5: Media and technology integration decision-making guide (extrapolated from earlier work by Alan Bates)**

<table>
<thead>
<tr>
<th>Medium</th>
<th>Technologies for Delivery</th>
<th>Educational Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Face-to-face contact</strong></td>
<td>• Overhead projectors (manual or electronic)</td>
<td>• Seminars, tutorials, classes, workshops, and lectures</td>
</tr>
<tr>
<td></td>
<td>• Specialist technologies</td>
<td>• Learner study groups or self-help groups</td>
</tr>
<tr>
<td></td>
<td>• All of the below</td>
<td>• Conferences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• One-to-one interaction, either between educator and learner, learner and learner, or learner and mentor (especially in workplace)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Drama-in-education or theatre-in-education sessions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Practical demonstration and activities</td>
</tr>
<tr>
<td><strong>Text</strong> (including graphics)</td>
<td>Print (or pdf e.g. digital textbooks)</td>
<td>• Books, booklets, and pamphlets (either already published or written specifically for a course)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Study guides, written either as stand-alone material or as ‘wrap-around’ guides to already published material</td>
</tr>
</tbody>
</table>
| Facsimile | - 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)

Mobile sms and increasingly also below ...
| - Written/printed correspondence
- One-multi point distribution

| Computers (including a range of applications such as e-mail, electronic databases, HTML documents, FTP or ASCII documents, CD-ROM, Flash
Networked smartboards
Blogs
Wikis
Fora (discussion threads) (synchronous/asynchronous?)
Chat rooms
Social media e.g. Twitter, Facebook, IMM with RSS feeds ...
| - 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)
<table>
<thead>
<tr>
<th><strong>Audio</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Cassettes</td>
<td>• Audio programmes (music, talk radio, documentary, literature review, lecture, panel discussion, news, current affairs, debate, drama etc)</td>
<td></td>
</tr>
<tr>
<td>Audio Compact Disc/Flash</td>
<td>• Audio programmes as for above</td>
<td></td>
</tr>
<tr>
<td>Radio broadcasts (national/community) and/or audio podcasts</td>
<td>• Radio programmes as above</td>
<td>• Radio phone-ins, talk-back radio</td>
</tr>
<tr>
<td>Telephone (including mobile)</td>
<td>• Telephone tutoring</td>
<td>• Information or enquiry service</td>
</tr>
<tr>
<td>Computers with related applications (including CD-ROMs) increasingly mobile</td>
<td>• Multimedia sound (audio files)</td>
<td>• Voice communication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Video</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Television Broadcasting (terrestrial, satellite or cable, digital or analogue transmission, including narrowcast educational television and mobile)</td>
<td>• Video programmes (music, talk shows, documentary, literature review, lecture, panel discussion, news, current affairs, debates, game shows, drama, films etc).</td>
<td>• Lectures</td>
</tr>
<tr>
<td>Video cassettes</td>
<td>• Video programmes as above</td>
<td>• lectures</td>
</tr>
<tr>
<td>DVD; video podcasts</td>
<td>• Video programmes as above</td>
<td>• Instructional material (for examples, art pictures or biological photographs)</td>
</tr>
<tr>
<td>Video conferencing</td>
<td>• Video conferences (with two way audio and video or one way video and two way audio)</td>
<td>• Point-to-multi-point classes with interactive video and audio</td>
</tr>
<tr>
<td>Computers/Internet/mobile smartphones/iphones/tablets/</td>
<td>• Videographics</td>
<td>• See-You-See-Me Conferences</td>
</tr>
<tr>
<td><strong>Integrated multimedia/ e-learning</strong></td>
<td><strong>Stand-alone</strong></td>
<td><strong>Networked</strong></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td>Computer-based workstation, CD-ROM/DVD, CDI, flashdrive etc</td>
<td>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. elluminate vs MOOC</td>
</tr>
</tbody>
</table>
### Table 6: Technology choices for different stages of the student walk at Unisa (from Mays 2011)

<table>
<thead>
<tr>
<th>Step in the student walk</th>
<th>Appropriate technology for purpose and audience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Marketing and orientation</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>2. Application: Responsible Open Access Programme</strong></td>
<td>Provision of diagnostic self-test quizzes available on-line, DVD, flash drives or in-person at regional centers 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 centers.</td>
</tr>
<tr>
<td><strong>3. Registration</strong></td>
<td>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 immediate access to digital versions of resources immediately on successful registration through the use of a toaster.</td>
</tr>
<tr>
<td><strong>4. Teaching and learning</strong></td>
<td>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., All contact with student-teachers should consciously model appropriate teacher-student behaviors.</td>
</tr>
<tr>
<td><strong>Orientation</strong></td>
<td>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). Ten percent of students either do not complete or do not pass their formative assessment. So:</td>
</tr>
<tr>
<td>Step in the student walk</td>
<td>Appropriate technology for purpose and audience</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Provide Short Message Service (SMS) and email reminders of deadlines.</td>
</tr>
<tr>
<td></td>
<td>Set up online discussion fora related to assignment preparation.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>Provide for online, postal and in-person submissions.</td>
</tr>
<tr>
<td></td>
<td>Provide for online marking and marks submission.</td>
</tr>
<tr>
<td></td>
<td>Automate routing of non-submissions or weak submissions for pro-active follow-up by an etutor—by phone, email or skype.</td>
</tr>
<tr>
<td></td>
<td>Provide feedback on problem areas in a tutorial letter, email, sms, in the online forum, via etutor or face-to-face tutor.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>Consolidation/Summative assessment registration</td>
<td>Ten percent of students successfully complete the formative assessment but although registered to attempt summative assessment do not present themselves.</td>
</tr>
<tr>
<td></td>
<td>So:</td>
</tr>
<tr>
<td></td>
<td>Provide SMS and email reminders of timetables.</td>
</tr>
<tr>
<td></td>
<td>Provide SMS or online booking of exam candidacy and automated reminders for deferrals.</td>
</tr>
<tr>
<td></td>
<td>Automate routing of non-registrations for pro-active follow-up by an etutor—by phone, email or Skype.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>Summative assessment</td>
<td>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% x 70% = 56%. Track trends automatically to prioritize interventions.</td>
</tr>
<tr>
<td></td>
<td>Where possible provide both online and more traditional opportunities to complete summative assessment</td>
</tr>
<tr>
<td>Step in the student walk</td>
<td>Appropriate technology for purpose and audience</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Automate routing of no-shows or poor performance for pro-active follow-up by an etutor—by phone, email or Skype</td>
</tr>
<tr>
<td>2nd examination opportunity</td>
<td>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 etutor—by phone, email or Skype. 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.</td>
</tr>
<tr>
<td>5. Graduation and alumni</td>
<td>Build and maintain a database of graduates; keep regular contact with alumni through a quarterly enewsletter; conduct eimpact studies; recruit graduates as etutors ...</td>
</tr>
</tbody>
</table>

**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 Abuja in the period November 2014 to March 2015.

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

- [http://elearningindustry.com/the-history-of-distance-learning-infographic](http://elearningindustry.com/the-history-of-distance-learning-infographic)
- [http://www.learningsolutionsmag.com/articles/1102/](http://www.learningsolutionsmag.com/articles/1102/)
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.

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**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:


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.
INTRODUCTION

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?
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.

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.
THE MEANING OF COMMUNITY

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.

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 Collepán de Huaylas, Peru
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.

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 other's 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.

**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.

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

We have moved to a higher level of engagement.

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.

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.
Appendix 3: Example of a complete sub-section of distance education materials

School knowledge and everyday knowledge

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.

<table>
<thead>
<tr>
<th>Group One</th>
<th>Group Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Group One</th>
<th>Group Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Working-class children</th>
<th>Middle-class children</th>
</tr>
</thead>
<tbody>
<tr>
<td>“It’s what we have for breakfast.”</td>
<td>“They’re vegetables.”</td>
<td></td>
</tr>
<tr>
<td>“It’s what Mum makes.”</td>
<td>“They’ve got butter in them.”</td>
<td></td>
</tr>
<tr>
<td>“I don’t like those.”</td>
<td>“They come from the sea.”</td>
<td></td>
</tr>
</tbody>
</table>

Note the way in which the conversation begins with practice that then leads into theory ...
Activities need not always require a written response ...

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

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.

Can you do it a second time? Can you put them together in a different way?

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?

... middle-class children have access to two principles of classification [here he means sorting, not classification in Bernstein’s sense of the term]: one formal and specialized (a system learnt informally and associated with everyday knowledge).
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.

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.

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

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 ...
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.)

<table>
<thead>
<tr>
<th>Assumptions about</th>
<th>Marge's lesson</th>
<th>Brett's lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers and learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learners and learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation (try to infer this from the teacher's general approach)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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. Ehlonyeni is summer in English. It is what?

Ls: It is summer

T: Ehlonyeni 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 ...
Bibliography/useful references


[http://www.enhancementthemes.ac.uk/documents/First_Year_Transforming_Assess.pdf](http://www.enhancementthemes.ac.uk/documents/First_Year_Transforming_Assess.pdf).


Welch, T. & Reed, Y. (Eds) 2005. *Designing and Delivering Distance Education: Quality Criteria and Case Studies from South Africa*. Johannesburg: NADEOSA.
