Towards an open schooling model for Nigeria

Contents

1. Introduction 3
2. Key components of the model 3
3. Business model 9
4. Systems overview 10
5. Quality indicators for key areas of activity 10
   5.1 Policy and planning 11
   5.2 Learners 12
   5.3 Programme development 12
   5.4 Course design 13
   5.5 Assessment 13
   5.6 Course materials 14
   5.7 Learner support 15
   5.8 Human resource strategy 15
   5.9 Management and administration 15
   5.10 Collaborative relationships 16
   5.11 Quality assurance 16
   5.12 Advocacy and information dissemination 17
   5.13 Results 17
6. Requirements of ICT system 17
7. Activity-based budgeting 19
8. References 20
9. Appendices 20
   Appendix 9.1: Models of provision 20
      9.1.1 The heutagogic/self-directed learner model 20
      9.1.2 Centre-based provision model 21
      9.1.3 Blended provision model 22
      9.1.4 Fully online model 23

9.1.5 MOOC model 24
Appendix 9.2: Example of a scaffolded assessment activity and associated rubric 26
Assignment 26
Purpose: 26
Time: 26
Task: 26
Feedback: 26
Certification: 26
General guidelines 29
Appendix 9.3: Example OER 30
Appendix 9.4: Example blended learning lesson plan 32
Appendix 9.5: Quality indicators for self-learning materials 38
1. Introduction and orientation 38
2. Selection and coherence of content 39
3. View of knowledge and use of learners' experience 39
4. Presentation of content and interactivity 40
5. Activities, feedback and assessment 40
6. Language 42
7. Layout and accessibility 42

1. Introduction

This discussion document seeks to draw together the ongoing discussions about the introduction of open schooling approaches in Nigeria, through ongoing interaction between the Universal Basic Education Commission (UBEC) and its sister agencies, and the Commonwealth of Learning (COL). It is a living document that will evolve as the open schooling model itself evolves.

2. Key components of the model

Underpinning the approach to the introduction of open schooling is a theory of change, which could be summarised as set out in Figure 1.

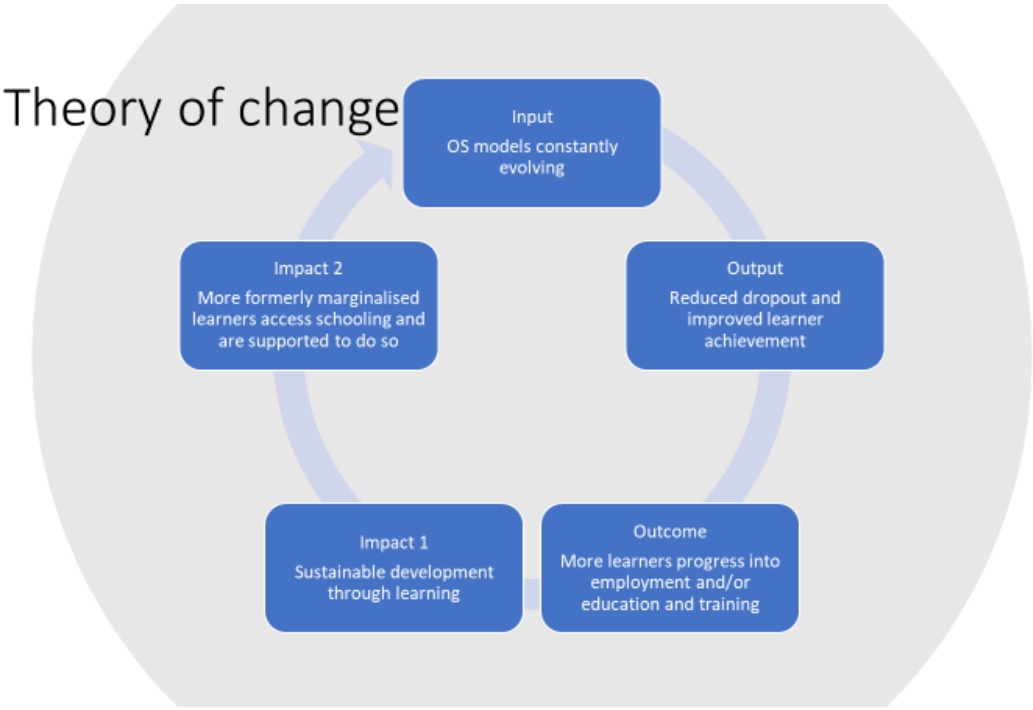


Figure 1: Theory of change

Figure 1 acknowledges that there is no one right way to offer open schooling and that models evolve in practice as needs change and lessons are learned.

The Constitution of the Commonwealth Open Schooling Association (COMOSA) explains as follows, for example:

> Open/Innovative Schooling (OIS): A supplementary or complementary model of schooling which uses a range of flexible approaches, based on open and distance learning methods, to provide structured learning opportunities. OIS is predominantly for out-of-schools youths and adolescents so they can complete their schooling and/or gain skills for the workplace. However, OIS provision may also extend to school level learning opportunities for adults (COMOSA, 2019, p.2).

In Nigeria, there is already need to explore additional models because of the inclusion of primary school learners in the target audience. Younger learners require different kinds of learning materials and

different kinds of support (including family and peer support) if access is to become success. Useful guidelines already exist and could be adapted or shared.[1]

However, if we can improve learner enrolment, retention, pass rates and progression, more learners should be able to progress into employment or further education and training.

Thus, improved schooling can lead to more sustainable development.

Children of parents who themselves have benefitted from schooling and secured employment will be more likely to support their own children in this process.

Open schooling could, and probably should, become part of an integrated schooling system as illustrated in Figure 2 below.

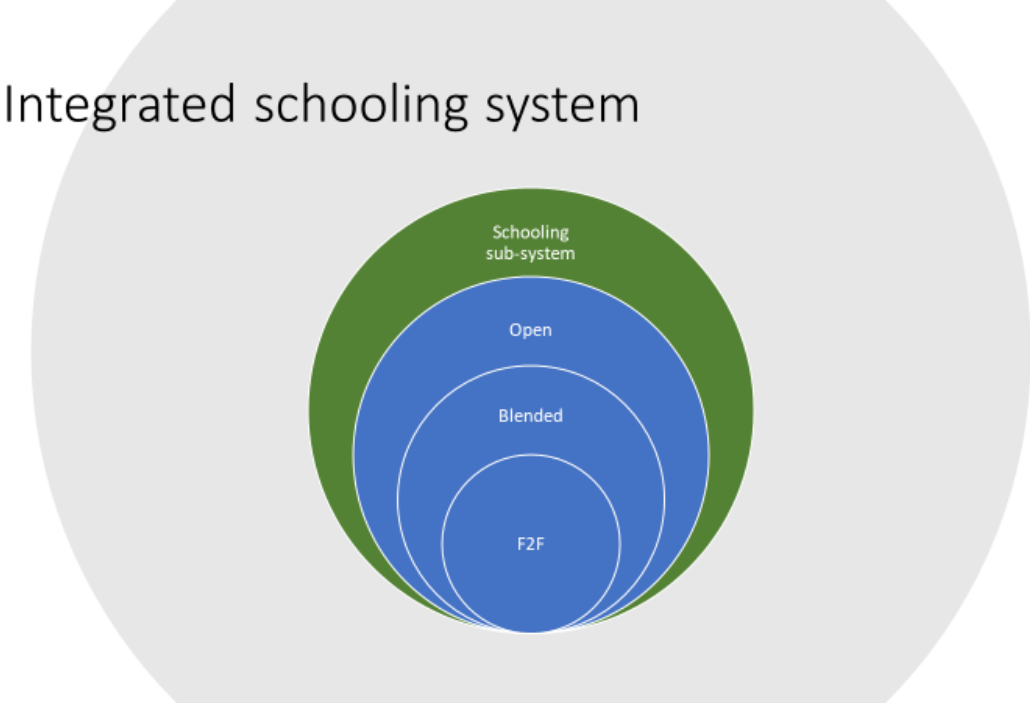


Figure 2: Integrated schooling system

Figure 2 suggests that face-to-face teaching is likely to remain at the heart of the schooling system, especially for younger learners who need to develop their social and peer-learning skills as well as for disabled learners/learners with special educational needs who may require very specialised support.

However, limited classroom spaces, teacher shortages, natural disasters, and most recently the COVID-19 pandemic, mean that we cannot reach all children all the time using traditional physical classrooms and face-to-face teaching. The physical distancing required for COVID-19 safety, for example, means that school campuses need to accommodate fewer learners at any one time, not more. So, it is inevitable that some form of blended learning will be needed to support continuity of learning for the times when learners are off-campus.

[1] https://education.alberta.ca/media/3795650/online-learning-student-and-family-guide-january-2-2019.pdf

Then we have learners who are unable to access campus-based schooling for various reasons, who need access to a much more flexible open distance learning model.

All three forms of provision, face-to-face, blended and open can benefit from high quality learning resources and flexibility in methods of teaching, assessment and support. Learners could also move between them, for example a traditional day scholar could access open distance learning options if unable to attend school due to ill-health or an open distance learner who is struggling could access the blended option for one or more subjects in order to get additional support of a different kind.

In building an open schooling system, we do not need necessarily to invest highly in new physical infrastructure, as illustrated in Figure 3 below.

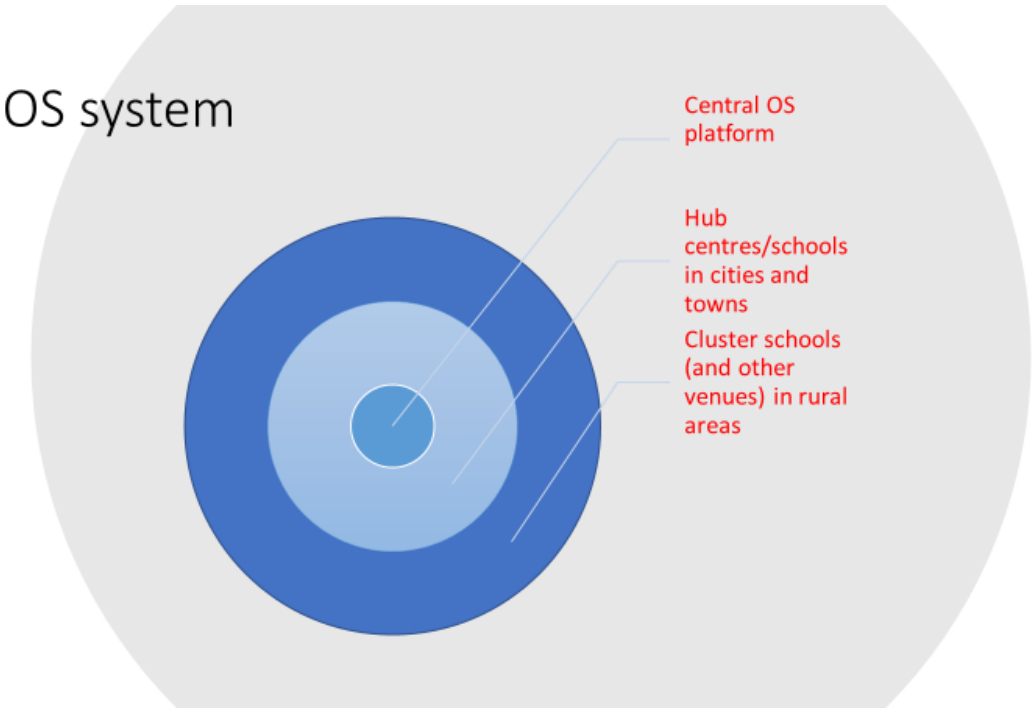


Figure 3: OS System components

Figure 3 illustrates that we can leverage existing physical infrastructure both to support open schooling and to enrich the traditional schooling system.

To avoid duplication and to enhance quality, we can create a central platform from which relevant curriculum-based OER can be accessed, by learners, teachers and parents/caregivers regardless of the mode they are involved with, face-to-face, blended or open. The central platform can also provide guidelines for stakeholders in different modes of provision as well as links to free online training courses, such as COL MOOCs and Moodle courses.[2]

In general, existing school buildings are under-utilised and can become sites of contact support for blended and open school learners after school hours, over weekends and/or during school holidays.

[2] https://www.colvee.org/

These existing school facilities could be augmented by other sites such as community centres and religious buildings.

All modes of schooling provision share three core elements, as illustrated in Figure 4 below.

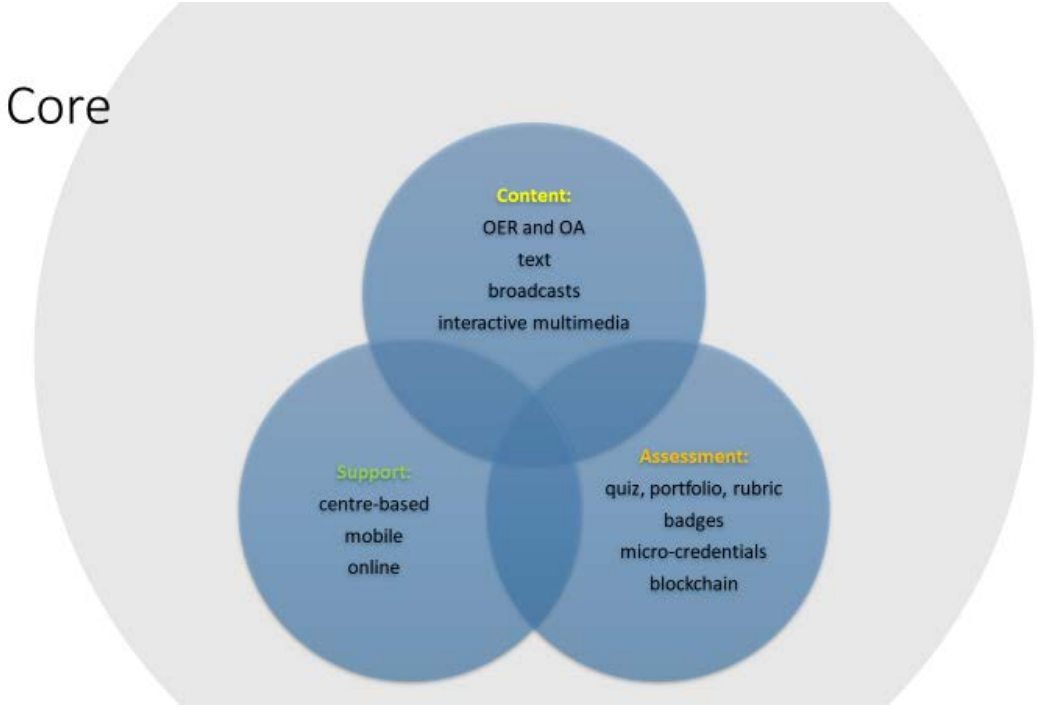


Figure 4: Core elements

As noted by COL (2020), open Schooling has traditionally addressed the needs of children and youth who have been unable to access or who have dropped out of the traditional school system. However, the closure of school campuses due to COVID-19 created an increased demand for self-study learning resources and guidelines for teachers in how to support learning continuity at a distance or online.

Countries which already had established open schools (for example the National Institute of Open Schooling in India[3], the Namibian College of Open Learning[4], the British Columbia Open School[5] in Canada, and Te Kura[6] in New Zealand) were able to leverage these existing resources in support strategies for disrupted campus-based provision.

Until recently, outside of India, much open schooling (OS) took the form of after-hours classes at day-schools. In these models, provision was impacted by campus closures in the same way as for the day school provision. However, open schools are now beginning to work towards use of digital OER accessible on mobile devices. This serves to overcome the costs of buying and distributing printed materials. However, high internet costs, and irregular internet access and power supply, have meant that a centre-based model is still needed to enable students to download content in many developing

[3] https://www.nios.ac.in/
[4] https://www.namcol.edu.na/
[5] https://www.openschool.bc.ca/
[6] https://www.tekura.school.nz/

contexts. In these contexts, use of mobile forms of communications such as individual and group calls, bulk sms and social media using text or voice messages which require less data usage can help to reduce the need for face-to-face contact. There is also a resurgence of interest in the use of broadcast media such as radio and television.

As a result of COVID-19, more countries have seen the need to move further into the online space. There is a growing recognition of the need for government intervention to increase public access to free or affordable connectivity coupled with the possibility of transferring the costs of textbook purchases to mobile devices already pre-loaded with curriculum-based digital content. This enables offline reading complemented with semi-synchronous sessions online for discussions and assignments, etc. Distance learning in the form of blended learning centred on school campuses and open schooling which may make use of school campuses after-hours and / or other centres or online platforms, are likely to be key features of new more resilient integrated schooling systems.

There will be need to revisit issues of policy, inclusive education practices, curriculum flexibility, use of OER and OEP, M&E, TEL and supportive financing if new models are to be designed, developed and implemented effectively.

At any one time, significant curriculum-based content development is in process in multiple institutions and countries. Formerly, the content was usually print-based and subsequently shared online digitally (e.g. through a repository like COL OASIS[7]) as a print-behind-glass offering. Increasingly, however, the content involves multimedia. This has raised course content file sizes from a few MBs to multiple GBs, the implications of which need to be borne in mind for institutions (e.g. server size and back-ups; size of SD cards for Aptus and other devices and implications for curriculum updates) and for learners (e.g. in terms of internet costs and speed for example). It is better to break audio and video media down into shorter, more focussed elements which make best use of the medium chosen (for example demonstrations of processes rather than talking head lectures).

The question arises, how best to use the content once created?

At the very least, a model for using the content in an open schooling context must answer the following three key questions:

- How will learners access the content?
- What learning support will be provided to help turn access into success?
- How and when will learning be assessed?

Currently there seem to be five main possible models of provision, each with its own emphasis, but none of which is mutually exclusive. All the models can use the same core learning resources, and all may be needed to address the diversity of learning needs and context. The following models may be considered:

[7] http://oasis.col.org/

1. **The heutagogic/self-directed learner model**
   The content is made openly available. The content can be accessed at any time from a website using the learners' own internet-connected device or the learner can visit a centre and download a copy of the content onto a flash-drive or onto their own device. Or they can pick up printed study material. Some institutions provide the content already saved onto a device such as a tablet or phablet, the cost of which is included in the course fees.
2. **Centre-based provision model**
   The content is made openly available. However, learners who do not have access to the internet can visit a centre to download the content to their own flash-drive or device or to pick up printed copy. Learners who do not have a device, must then access the content in a computer lab at the centre.
3. **Blended provision model**
   The content is accessed through an LMS and so there is need for a separate repository to make the core content available even to learners not registered for the programme. The content is organised into units or weeks of learning. Most of the content can be downloaded and worked through offline. Assessment tasks can be completed offline and then uploaded. Provision is made for semi-synchronous online discussions, but these are not necessarily compulsory.
4. **Fully online model**
   The content is accessed through an LMS and so there is need for a separate repository to make the core content available even to learners not registered for the programme. The content is typically organised into units or weeks of learning. Most of the content is integrated into online learning activities and so learners need to be constantly online while learning. Assessment tasks also need to be completed online and often involve group activities. Provision is made for semi-synchronous as well as synchronous online discussions and participation is often, but not necessarily, compulsory. In many online programmes, participation in online forums earns credits towards the final assessment. There is usually a definite start and end date, but it is not necessarily tied to the school year. For example, a continuous enrolment process could be followed for a school programme comprising 8 subjects
5. **MOOC model**
   A complete subject and level could conceivably be packaged as a standalone MOOC.
   The original content would be accessed through the MOOC and so there is need for a separate repository to make the original core content available even to learners not registered for the MOOC.
   However, for a constructivist kind of MOOC, the content might grow organically – so for example an outcomes-based school History MOOC, might well have different learners, or groups of learners, working on different historical eras/events/projects as they work towards achieving the outcomes that each learner wishes to strive for.

These models are explored further in **Appendix 9.1**.

Our recent discussions indicate that initially the open schooling model we will pilot in six states in sixty centres will be blended. However, it is worth considering the other options also in the medium to longer-term.

3. Business model

We will need to develop a business model for open schooling if it is to be sustainable. Following Osterwalder, Pigneur, & Tucci (2005) and Tian & Martin (2014) we might expect institutions to develop an overview similar to the example below.

Table 1: Illustrative business model (adapted from Mays, 2016b)

<table>
<tr>
<td rowspan="2">Key partners
UBEC
Sister agencies
State MoEs
SUBEBs
Centres
Schools
Religious authorities
Traditional authorities</td>
<td>Key activities
Teaching, learning and assessment
Community Engagement</td>
<td rowspan="2">Value proposition
To provide access to quality open schooling opportunities to the people of Nigeria informed by a shared vision, mission and values</td>
<td>Customer relationship
Leaners expect high quality educational opportunities that are affordable and flexibly designed to meet their needs and aspirations</td>
<td rowspan="2">Customer segment
Schooling level learners
6-23 years old
Migrant learners
Learners with disabilities
Girls</td>
</tr>
<tr>
<td>Key resources
Infrastructure for teaching and learning, assessment and community engagement
Strong ICT backbone
Committed teachers
Strong strategic and operational management at national, state and centre levels</td>
<td>Channels
Centre-based provision in flexible hours
Part-time provision
ODeL provision:
• Correspondence
• Online
• Blended
• Workplace-based (e.g. for TVET)</td>
</tr>
<tr>
<td colspan="2">Cost structure
Each state should cover its own direct costs of development, implementation and review but also contribute towards the central platform</td>
<td colspan="3">Revenue stream
Fee income may be possible for older learners
SUBEBs will need to cover costs of equipping and maintaining centres of support and remunerating tutors
Use of OER to lower content costs</td>
</tr>
</table>

The bold headings in Table 1 indicate the areas requiring clarification.

For each state programme we would then expect the SUBEB to develop an activity-based budget and to verify that what they propose is both viable and sustainable. Sections 4 and 5 outline the kinds of activities that will be needed while section 6 outlines the central ICT requirements and section 7 discusses some of the costing issues that need to be addressed in the activity-based budget.

4. Systems overview

Regardless of the specific model implemented by different states, there are certain systems elements which will be common, as illustrated in Figure 5 which is based on the work of Greville Rumble as reported by Du Vivier (2009).

The model indicates the relationship between four inter-related sub-systems which can be described as follows:

1. **Materials sub-system** – which includes all activities involved in developing, publishing and disseminating self-instructional materials, whether these are print-based, digital or a combination of both.

2. **Learner sub-system** – once learning materials have been produced, responsibility for learners is passed over to the learner sub-system. This comprises all the activities, staff and other resources that are involved in facilitating learning and managing learners' progress through the programme.

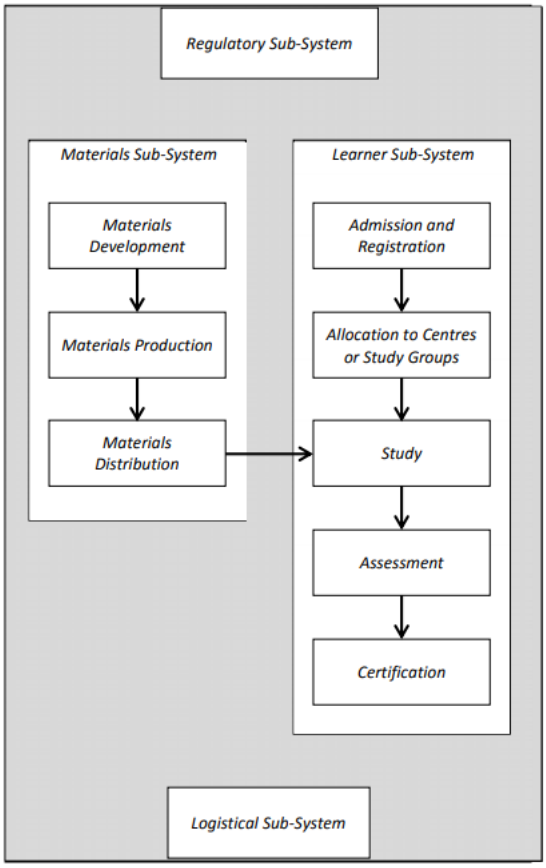


Figure 5: Rumble's systems model for OS (Du Vivier, 2009)

3. **Logistical sub-system** – The materials and learner sub-systems are supported by other units that procure and manage resources for the institution. Those units look after finances, human resources and information and communication technology, for example.

4. **Regulatory sub-system** – Finally, overall management and guidance are the responsibility of the regulatory sub-system. All activities related to strategic planning, policy formulation and monitoring of the institution's performance in its goals are part of this sub-system.

5. Quality indicators for key areas of activity

In 2010, COL published a set of guiding criteria for open schooling which informs the discussion in this section. The publication identified the following key areas for which guidelines were needed (and which are mapped to the sub-systems identified in Section 4).

- Policy and planning (Regulatory Sub-System)
- Learners (Learner Sub-System)
- Programme development (Materials Sub-System)
- Course design (Materials Sub-System)
- Course materials (Materials Sub-System)
- Assessment (Learner Sub-System)

- Learner support (Learner Sub-System)
- Human resource strategy (Logistical Sub-System)
- Management and administration (Regulatory Sub-System)
- Collaborative relationships (Logistical Sub-System)
- Quality assurance (Regulatory Sub-System)
- Advocacy and information dissemination (Regulatory Sub-System)
- Results (Regulatory Sub-System) (COL, 2010).

The discussion that follows explores the key issues and how they might be understood in the context of open schooling in Nigeria.

5.1 Policy and planning

What is the quality guideline?

> The educational provider has a clear sense of purpose and direction, based on both national priorities and the quality demands of cost-effective educational provision. There are both a rationale and relevant systems for the use of distance methods to achieve the purpose of the programme for the target learners, (COL, 2010, p33).

What is expected in Open Schooling in Nigeria's pilot initiative?

- Address the high number of out-of-school-children (OOSC) and youth in Nigeria which is seen as both a national and a state level priority.
- Create a more flexible and engaging alternative approach to schooling for more children who have been unable to access schooling or who have dropped out of schooling.
- Where necessary, at national and/or state level, revisit or formulate policy related to issues such as copyright/OER/IPR, ICT infrastructure, admission, assessment and accreditation, human resourcing to create a more flexible and responsive environment.
- Before registering learners, ensure there is a clear model for offering open schooling to the particular learners being targeted by the state and its centres. The model must have clear answers for the following questions among others:
    - How will we market the programme? And to whom?
    - How will learners register? And when?
    - When can learners visit centres? Set hours? Any time?
    - What support will be offered at centres?
        - Access to core content?
        - Access to supplementary resources e.g. library, equipment for practicals?
        - Access to ICT and connectivity?
        - Access to ICT support? Including assistive technology for LSEN?
        - Access to general support?
        - Access to content-specific support/tutorial sessions?
    - How will tutors be recruited, trained, monitored, supported and paid?
        - Teachers?
        - Parents/care-givers?
    - How will assessment be managed?
    - How will we track registration, retention, pass rates and progression?

- Before registering learners, undertake some contingency planning to identify and pre-empt issues that might impact negatively on learner enrolment, retention, pass rates and progression.
- Develop plans for both annual and 3-5-year renewal cycles so that the model of provision evolves in response to evidence from practice.
- Involve all stakeholders, elected, traditional, religious and community leaders, employers and teachers, parents and learners, in the planning and renewal processes.
- Develop inclusive policies and practices for the effective support of learners with disabilities.

5.2 Learners

What is the quality guideline?

> There is up-to-date, detailed information about past, present and potential learners, This is used to inform policy and planning of programme development, course design and materials development, learner support and other relevant aspects of educational provision, (COL, 2010, p. 34).

What is expected in Open Schooling in Nigeria's pilot initiative?

- Different states and centres need to clarify their target audiences.
- Centres will need to capture demographic, prior learning and current knowledge/skills of new learners who register.
- Centres will then need to track retention, pass rates and progression of learners after registration.

This will entail the need to:

- Develop and maintain an education management information system that enables data collection and analysis at centre, state and national levels.
- Develop, maintain, analyse trends and evolve appropriate responses to changing learner profiles regarding, for example:
    - Demographic information e.g. sex, age and specified target sub-populations
    - Technology profile
    - Previous schooling (if any) or related prior learning experiences especially in literacy and numeracy
    - Special needs support e.g. for learners living with visual or auditory impairment
    - Access to formal open schooling centres and other support networks
    - Language profile
    - Work experience where applicable.

5.3 Programme development

What is the quality guideline?

> Subject to national prescriptions, programmes are flexible and designed with both national needs and the needs of prospective learners and employers in mind; their form and structure encourage access and are responsive to changing environments; learning and assessment methods are appropriate to the purpose and outcomes of the programme, (COL, 2010, p.35).

What is expected in Open Schooling in Nigeria's pilot initiative?

- Base the open schooling programme on the national school curriculum guidelines.
- Break each subject and level in the guidelines down into themes and sub-topics.
- Number curriculum-based OER sequentially so that stakeholders can navigate through the subject e.g. English Year 6 Resource 3.2.4 is the fourth learning resource, for the second topic in the third theme of the curriculum.
- Ensure the model developed and implemented in 5.1 integrates curriculum-based content provision, learner and learning support and assessment; and
- Allow multiple pathways towards completion, for example one subject at a time, one level at a time, continuous enrolment, assessment on demand.
- Due to the openness of entry, make provision to provide sufficient support to learners assessed with limited academic, literacy, numeracy, ICT and study skills on entry, through provision of bridging/foundation courses, options for increased face-to-face support, additional learning guides, increased time to completion or other measures that may be appropriate.

5.4 Course design

What is the quality guideline?

> The course curriculum is well researched, with aims and learning outcomes appropriate to the level of study; content, teaching and learning and assessment methods encourage the achievement of the aims and learning outcomes; there is an identified process of development and evaluation of courses, (COL, 2010, p.37).

What is expected in Open Schooling in Nigeria's pilot initiative?

- Ensure each subject and level must address the content and outcomes set out in the national curriculum.
- Agree on key assessment points in the learning journey and also whether exit level assessment is by examination (if so, how will this be managed) or by some form of portfolio.
- Clarify how much of the learning should be completed independently using the OER that have been developed and how much should be centre-based (with an alternative strategy for learners unable to attend in person).
- Where technology and/or e-learning are planned, ensure systems, technologies and support arrangements are accessible for all enrolled learners.
- Provide estimates of notional learning time for each lesson e.g. one hour and activity e.g. 15 minutes to help learners manage their independent learning.

5.5 Assessment

What is the quality guideline?

> Assessment is part of the course design; formative assessment is an essential part of the teaching and learning process. Assessment is well managed with sufficient external moderation to meet the requirements of accreditation bodies, (COL, 2010, p.40).

What is expected in Open Schooling in Nigeria's pilot initiative?

- Include activities and feedback in the development of OER.
- Decide on the assessment strategy and how feedback will be provided, perhaps after completion of every topic or theme.
- Develop alternative assessments for learners with disabilities.
- Consider allowing learners to complete one subject at a time and to gain a micro-credential.
- Consider using rubrics to support self- and peer-assessment.
- Decide on the strategy for exit-level assessment, e.g. formal state invigilated exams, centre-based assessment, online assessment, portfolios, etc.

An example of an Assessment task for teachers as well as an associated rubric to encourage self- and peer- assessment and some general guidelines are included in **Appendix 9.2**.

5.6 Course materials

What is the quality guideline?

> The content, assessment, and teaching and learning approaches in the course materials support the aims and learning outcomes; the materials are accessibly presented; they teach in a coherent way that engages the learners; there is an identified process of development and evaluation of course materials, (COL, 2010, p.38).

What is expected in Open Schooling in Nigeria's pilot initiative?

- A common template is needed for the OER content being developed to avoid confusing stakeholders. The suggested template is as follows:
    - Title e.g. 1.2.4 Activity theory
    - Objectives/outcomes
    - Introductory content, activity and feedback
    - Developmental content, activity and feedback
    - Consolidating content, activity and feedback
    - Summary
    - Sources/references
    - Licence
- An illustration is provided in **Appendix 9.3**. Note that the example could be worked through mostly in print or on a basic mobile device. Links to online resources require internet access, which may only be available during centre-based contact sessions.
- All content – should be OER.

- Once drafted, think about how the OER might be adapted better to suit the needs of learners with disabilities.

5.7 Learner support

What is the quality guideline?

> Learners have a range of opportunities for real two-way communication through the use of various forms of technology for tutoring at a distance, contact tutoring, mentoring where appropriate, counselling (both remote and face-to-face) and the stimulation of peer support structures, (COL, 2010, p.42).

What is expected in Open Schooling in Nigeria's pilot initiative?

- Provide hours for when learners can access general guidance, support or mentoring (including outside of normal "office" hours.
- Provide a schedule of formal lessons.
- Provide access to wifi so that digital resources can be accessed and/or downloaded.
- Distribute study materials (could be in print or on tablet or downloaded to the learners' own device).
- Administer assessment (e.g. collect assignments from learners, allocate bundle of assignments to tutors for marking, record the marks in the system, moderate a sample of the assignments, return marked assignments to learners).
- Develop strategies for communication between contact sessions, e.g. Zoom, Skype, WhatsApp groups, SMS.

5.8 Human resource strategy

What is the quality guideline?

> The staff structure and the roles and key performance areas, experience and qualifications are all appropriate for the education and training services provided; staff development programmes equip staff to perform their roles and tasks effectively, (COL, 2020, p.44).

What is expected in Open Schooling in Nigeria's pilot initiative?

- SUBEBS and Centre Managers appoint, monitor and remunerate tutors.
- Recruit tutors who will ideally be current or retired trained teachers but other educated persons could be considered and training then provided.
- Consider using unemployed youth to provide mentoring support.
- Provide training courses for tutors, assessors, mentors, parents/caregivers on the central learning management system platform.
- Train tutors to teach using a blended approach. An example of a plan for blended teaching is provided in **Appendix 9.4**.

5.9 Management and administration

What is the quality guideline?

> There is effective, transparent and democratic management of communication and information as well as human and materials resources; efficient administrative systems support the activities of the educational provider; the educational provider is functionally sound and can make reliable educational provision, (COL, 2010, p.45).

What is expected in Open Schooling in Nigeria's pilot initiative?

- UBEC plays an overall coordinating role.
- SUBEBs coordinate the activities in their state, and provide infrastructure and funding.
- Centre managers need to ensure the learning environment is safe and conducive to learning, that the support detailed in 4.7 is availed and that enrolment, retention, pass rates and progression are monitored (disaggregated by sex, age, and other demographics of importance to the state.

5.10 Collaborative relationships

What is the quality guideline?

> In the interests of cost-effective provision of education and training, collaborative relationships are formed and collaborative projects are undertaken whenever possible, (COL, 2010, p.49).

What is expected in Open Schooling in Nigeria's pilot initiative?

- UBEC will continue to liaise with its sister agencies and other national and state stakeholders.
- SUBEBs will need to maintain communications with state Ministries on the one hand and with Centres on the other.
- Centre managers will need to liaise with local communities, traditional leaders, religious leaders, youth leaders and NGOs in their local areas.

5.11 Quality assurance

What is the quality guideline?

> There is a quality assurance framework that integrates policy and practice, and that informs a clear cycle of planning, implementing, monitoring, reflecting and acting to ensure that learners' and staff's needs as well as the needs of other stakeholders are met, (COL, 2010, p. 50).

What is expected in Open Schooling in Nigeria's pilot initiative?

- Quality assure content before it is shared openly. A set of guiding criteria for quality assurers is provided in **Appendix 9.5**.
- Ensure centres are ready to be used. They will need to meet COVID-19 and normal public health and safety requirements (including appropriate facilities for girls). Centres will need reliable power supply and internet. Given the digital nature of the OER being created, each learning space will require an internet-enabled computer, a data projector and a screen. Learners will require some form of mobile device.
- Develop and implement an M&E strategy to ensure that decisions made about whether to scale, or what to scale and how, are evidence-based. The evidence needs to include quantitative data (enrolment, retention, pass rates, progression) and qualitative data (observation, student and tutor satisfaction indicators).

5.12 Advocacy and information dissemination

What is the quality guideline?

> Education services provided by the institution are effectively and accurately promoted in a variety of ways, (COL, 2010, p.52).

What is expected in Open Schooling in Nigeria's pilot initiative?

- UBEC will run a national campaign promoting open schooling using national radio, television and news media.
- SUBEBs will run state-wide advocacy campaigns.
- Centre managers engage with local communities, traditional, religious and youth leaders to promote open schooling.

5.13 Results

What is the quality guideline?

> The educational provider fulfils its mission and individual programmes achieve valid teaching and learning goals in cost-effective ways that have a positive impact on society and meet the needs of clients and national priorities, (COL, 2010, p.53).

What is expected in Open Schooling in Nigeria's pilot initiative?

- Apart from the strategies outlined in 5.11, as part of the M&E strategy, it would be appropriate to undertake some form of return on investment study.

Supporting all the above, there will need to be a robust ICT system in place.

6. Requirements of ICT system

UBEC will require:

- An IT Department established at UBEC to provide the necessary technical expertise and maintenance of the system
- A Quality Assurance Department established at UBEC to assure quality provision of education at all stages
- Continuous improvement of the Infrastructure for Open, Distance and Online Learning Environments
- Continuous training of teachers to develop or use existing OER to provide quality education through online learning
- Continuous improvement in the development and implementation of synchronous, asynchronous and semi-synchronous approaches to provision of open schooling opportunities.

The centralised online learning system should have the following functionalities:

- It must support **collaborative authoring** in multi-media with the ability to download constituent text/audio/video resources in multiple formats.
- It must facilitate **content management** and versioning.
- It must allow the **tracking of individual learners** over a period with continuous enrolment in one or more subjects and no pre-specified start or end dates.
- It must be able to **accommodate thousands** of learners all proceeding at their own pace in one to ten subject areas.
- It must be possible to track progress through **dashboards** at the national level as well as separately at state level.
- It must be possible to **work offline** most of the time and **sync online** at key stages e.g. submission of modular assignments in text, audio and/or video format.
- It must be able to accommodate **more than one language** e.g. English, Hausa and Igbo.
- It must also be able to accommodate **mathematics and science formulae**.
- It must have a **formal assessment plug-in** that syncs to a national database but also the ability to create **in-course quizzes** that can be randomly generated and attempted multiple times.
- It must have a **dashboard for learners** that helps learners to see their progress, like in Khan Academy.
- It should be possible for learners to gain **badges** e.g. successful completion of a quiz, micro-credentials e.g. successful completion of a module and formal verifiable national certificates e.g. successful completion of a subject grade.
- It must have the option to request additional **tutor support** online, like with Khan Academy.
- It must have an option to participate in **open-ended discussion forums**.
- It should be possible to **link to common social media platforms** like WhatsApp in ways that protect learners' real identity.
- It must be able to accommodate access to open educational resources **(OER)**
- It must be able to accommodate **online examinations**
- It must be able to accommodate the **grading** of assignments, tests and all types of assessment.
- It must be able to accommodate access to **collaborative learning technologies**.
- It must be able to create **MOOCs**.
- It must enable **video conferencing**.
- It must be **upgradable**.

The decentralised support centres should have:

- Reliable power supply and internet
- Access to the centralised learning system and ability both to download (e.g. updated learning resources) and upload (e.g. enrolment, retention, assessment marks, pass rates, progression data).

In addition, each learning space within the centre should have:

- An internet enabled laptop
- Access to the centre wifi
- Access to the learning system to download/open content

- A data projector, screen and speakers to enable the watching of video content, for example, during a face-to-face contact session.

7. Activity-based budgeting

How do we cost the sub-systems in open schooling? Here are some examples of costs incurred in each of the sub-systems (updated slightly from Du Vivier, 2008).

- **Materials sub-system**
    - Materials development
        - Training course/content developers
        - Paying external course/content developers where needed
        - Paying ICT specialists e.g. for audio or video editing, etc.
        - Paying external quality assurers
        - Piloting and revising materials
    - Materials production
        - Paying for digital editing and publishing
        - Paying for original artwork, animations etc.
        - Paying for copyrighted content if OER are not available
        - Printing and distributing any printed content
    - Materials distribution (e.g. printed materials, tablets)
    - Storage of any printed materials and off-site back-up and versioning of digital content
    - Packing materials if needed
    - Transporting printed materials, tablets etc.
    - Communication with all stakeholders.
- **Learner sub-system**
    - Admission and registration
        - Assessing applications from potential learners
        - Entering learner registration data into education management information system
        - Checking data for accuracy and completeness
    - Allocating learners to centres, study groups, tutors
        - Renting and/or maintaining centres
        - Providing utilities of centres
        - Paying centre managers
        - Providing and maintaining ICT – hardware, software, systems and connectivity at centres
        - Communicating with learners
    - Study
        - Paying tutors (for physical teaching and online teaching)
        - Training tutors
        - Providing materials for tutors (e.g. white boards and markers for contact sessions)
    - Assessment
        - Paying for marking assignments
        - Renting of examination hall if applicable
        - Paying examination invigilators if applicable

        - Paying for exam or portfolio or other exit level assessment marking
    - Certification
        - Checking that learners have met all the requirements for certification
        - Printing certificates (or designing and distributing digital certificates)
        - Conducting graduation ceremonies if applicable (could be a useful form of advocacy and marketing
- **Logistical sub-system**
    - Recruiting part-time tutors and issuing contracts and paying them
    - Maintaining the national digital platforms and networks for managing and teaching
    - Maintaining software licences
    - Insuring the institution, its property and its staff
- **Regulatory sub-system**
    - Paying staff
    - Paying board of governors, advisors, consultants, etc.
    - Costs of strategic planning and review workshops and meetings
    - Costs of monitoring and evaluation. (Adapted from Du Vivier, 2008)

8. References

Commonwealth of Learning). (2010). *Quality assurance toolkit for open schools*. Vancouver: COL. Retrieved from: http://oasis.col.org/handle/11599/107

Commonwealth of Learning (COL). (2020). *Towards more resilient schooling: possible models for the future*. Vancouver: COL. Retrieved from: http://oasis.col.org/handle/11599/3612

Commonwealth Open Schooling Association (COMOSA). *Revised Constitution (October, 2019).* Retrieved from: https://comosaconnect.org/wp-content/uploads/2019/11/Commonwealth-Open-Schooling-Association-Constitution-October-2019.pdf

Du Vivier, E. (2008). *Costs and Financing in Open Schools*. Vancouver: COL. Retrieved from: http://oasis.col.org/handle/11599/42

Du Viver, E. (2009). *The Open Schools Handbook: A Resource Guide for Managers*. Vancouver: COL.

Mays, T. (2016). *Revised illustrative business model developed for Afica Nazarene University*. Johannesburg: OER Africa/Saide.

Osterwalder, A., Pigneur, Y., & Tucci, C. L. (2005). Clarifying business models: origins, present, and future of the concept. *Communications of the Association for Information Sciences, 16*(1), 1-25.

Tian, X., & Martin, B. (2014). Business models for higher education: an Australian perspective. *The Journal of Management Development, 33*(10), 932-948.

9. Appendices

Appendix 9.1: Models of provision

9.1.1 The heutagogic/self-directed learner model

Access	The content is made openly available. The content can be accessed at any time from a website using the learners' own internet-connected device or the learner can visit a centre and download a copy of the content onto a flash-drive or onto their own device. Or they can pick up printed study material.

	Some institutions provide the content already saved onto a device such as a tablet or phablet, the cost of which is included in the course fees.
Support	No support is provided. It is up to the learners to manage their own studies and to apply for examination when they feel ready.
Assessment	Learners apply to write national exams once a year alongside day scholars. OR The exams are digitised and available on-demand whenever the learner feels ready and able to visit an approved centre.
Discussion	This model assumes a high level of learner autonomy and hence high levels of independent time management and study skills, as well as high level literacy and digital fluency skills and continuous access to a device (but not necessarily continuous access to the internet since digital content can be downloaded for use off-line). However, it's a relatively low-cost model for learners and extremely flexible, especially if paired with on-demand exams, which could be mediated online or at a centre. For example, a day scholar may spend 3 hours a week for 30 weeks learning a subject in a classroom and may also do 2 hours of homework and revision per week as well – a total of 150 learning hours. Freed of timetables and the need to attend a physical venue, an autonomous unemployed learner could easily complete those 150 hours of learning over a 3-week period. Assuming, however, that such a learner needs also to attend to other activities, a more reasonable estimate could be to complete one subject every 6 weeks. However, the ability to focus on only one subject at a time over a short period, rather than 8 to 10 subjects over an extended period, would probably result in higher success rates. It will usually be necessary to develop some form of 'how-to-study' guide. This model might be appropriate for older learners in conflict zones or in nomadic communities where regular access to physical venues or online services might not be possible. The model could also augment the traditional school system. Day scholars might access the content for revision purposes, to supplement classroom learning in areas they find difficult, or to prevent falling behind due to absence from school because of illness or pregnancy or other reasons. The model can usefully be supported by radio and television broadcasting.

9.1.2 Centre-based provision model

Access	The content is made openly available. However, learners who do not have access to the internet can visit a centre to download the content to their own flash-drive or device or to pick up printed copy. Learners who do not have a device, must then access the content in a computer lab at the centre.
Support	Support may be limited only to providing technical access – in a dedicated centre probably within an extended time, for example 8am to 9pm. However, most learners will probably need some additional learning support to be successful. Centre-based support could be informal e.g. a tutor is always on duty during open hours to provide general support, for example accessing the content, time management, study skills etc.

	Learning support that is subject-specific probably needs to be scheduled due to the need to ensure appropriately qualified teachers are available. Most commonly, this takes the form of after-hours support from a day school, for example from 1730 to 2030. Given the limited time available, it follows that teachers cannot cover everything in the same way they do with day scholars. So, to make best use of the limited time available, it is probably necessary to plan the curriculum so that learners work through most of the content in their own time and the contact time is then used to focus only on problem areas or practical components such as science experiments – essentially this is then a flipped classroom approach.
Assessment	Learners apply to write national exams once a year alongside day scholars. OR The exams are digitised and available on-demand whenever the learner feels ready. In addition, regular contact sessions create an opportunity for interim assessments and feedback after completion of significant portions of the curriculum. Typically, in distance education, two to three such assignments precede the final exam and count towards the final marks.
Discussion	This model assumes that most learners will require additional support for high levels of retention, success, and progression. The model is appropriate for areas with limited or no internet access. The model can also be used to augment the traditional classroom for learners requiring additional support in a particular subject, for learners who have progressed but need to repeat a subject, and for learners wanting to include a subject that is not offered in the day school curriculum. There is need to train centre managers and teachers in appropriate strategies to support non-traditional learners. Marketing needs to make clear how the model differs from traditional schooling.

9.1.3 Blended provision model

Access	The content is accessed through an LMS and so there is need for a separate repository to make the core content available even to learners not registered for the programme. The content is organised into units or weeks of learning. Most of the content can be downloaded and worked through offline. Assessment tasks can be completed offline and then uploaded. Provision is made for semi-synchronous online discussions, but these are not necessarily compulsory.
Support	Feedback on assignments and student questions are mostly managed within the LMS and possibly with telephonic, email, WhatsApp, Skype or similar applications for additional support. Contact support may or may not be offered and may or may not be compulsory. Support may be limited only to providing technical access – in a dedicated centre probably within an extended time, for example 8am to 9pm. However, some learners may need learning support, in addition to the online forums and assignment feedback built into the LMS-based course, to be

	successful and this could take the form of a limited number of optional contact sessions in decentralised centres, for example one Saturday a month in schools, colleges, community centres, church halls etc that have been rented for the day for this purpose.
Assessment	Learners apply to write national exams once a year alongside day scholars. OR The exams are digitised and available on-demand whenever the learner feels ready. In addition, two to three assignments submitted and assessed online would usually precede the final exam and count towards the final marks.
Discussion	This model assumes that most learners will require additional support for high levels of retention, success, and progression. The model is appropriate for areas with some internet access but where the access is unreliable or expensive. The model can also be used to augment the traditional classroom for learners requiring additional support in a particular subject, for learners who have progressed but need to repeat a subject, and for learners wanting to include a subject that is not offered in the day school curriculum. There is need to train centre managers and teachers in appropriate strategies to use to support non-traditional learners. Both learners and teachers need training and support to use the LMS. Marketing needs to make clear how the model differs from traditional schooling.

9.1.4 Fully online model

Access	The content is accessed through an LMS and so there is need for a separate repository to make the core content available even to learners not registered for the programme. The content is typically organised into units or weeks of learning. Most of the content is integrated into online learning activities and so learners need to be constantly online while learning. Assessment tasks also need to be completed online and often involve group activities. Provision is made for semi-synchronous as well as synchronous online discussions and participation is often, but not necessarily, compulsory. In many online programmes, participation in online forums earns credits towards the final assessment. There is usually a definite start and end date, but it is not necessarily tied to the school year. For example, a continuous enrolment process could be followed for a school programme comprising 8 subjects as follows: • Month 1 cohort 1 start with Subject 1 followed by subjects 2, 3, 4, 5 ,6 , 7, 8 but Month 2 cohort 2 start with Subject 2 followed by subjects 3, 4, 5, 6, 7, 8, 1. In this model, the institution needs to support only one subject every 3-6 weeks as follows: • Cohort 1: 1,2,3,4,5,6,7,8 • Cohort 2: 2,3,4,5,6,7,8,1 • Cohort 3: 3,4,5,6,7,8,1,2

	• Cohort 3: 4,5,6,7,8,1,2,3 etc.
Support	Feedback on assignments and student questions are managed within the LMS but possibly with a range of additional social media and ICT outside of the LMS e.g. non participation may result in automated reminders from within the system which are then escalated to call centre support desk e.g. "We note that you have not accessed the course for the past two weeks. Are you having a problem we can help you with?" Face-to-face support is not offered, and most learners will never visit the offices/campus of the provider.
Assessment	Two to three assignments are submitted and assessed online prior to the final summative assessment and count towards the final marks. The final summative assessment may involve some form of proctored online examination but more likely perhaps instead involve more authentic assessments such as projects or portfolios or video demonstrations etc in which learners need to demonstrate what they can do with what they have learned. The latter is more likely in systems that have adopted outcomes- or competency-based curricula.
Discussion	The model is appropriate for areas with reliable and affordable internet access. The model can also be used to augment the traditional classroom for learners requiring additional support in a particular subject, for learners who have progressed but need to repeat a subject, and for learners wanting to include a subject that is not offered in the day school curriculum. There is need to train managers (e.g. of the platform and of supporting call centres) and to train teachers in appropriate strategies to use to support non-traditional learners. Both learners and teachers need training and support to use the LMS. Marketing needs to make clear how the model differs from traditional schooling.

9.1.5 MOOC model

Access	A complete subject and level could conceivably be packaged as a standalone MOOC. The original content would be accessed through the MOOC and so there is need for a separate repository to make the original core content available even to learners not registered for the MOOC. However, for a constructivist kind of MOOC, the content might grow organically – so for example an outcomes-based school History MOOC, might well have different learners, or groups of learners, working on different historical eras/events/projects as they work towards achieving the outcomes that each learner wishes to strive for.
Support	Although many mediated MOOCs have clear start and end dates like most online learning programmes, it is not necessarily the case that a MOOC needs to be time-bound in any way. MOOCs that are mediated by a tutor of some kind, usually have clear start and end dates however, and support will then usually be a mix of tutor and peers engaging in asking questions and constructing responses. However, a MOOC is not necessarily mediated in this way.

	It is possible to offer a MOOC that assumes many users working independently through guided activities and using self-assessment rubrics or automated feedback (as in Khan Academy for example). Such learners start and end whenever it suits them. Arguably, a more powerful use of a MOOC is one that assumes peer interaction – between whichever learners happen to be active at any one time: possibly retaining a historical record of all past interactions in addition to current interactions.
Assessment	For an xMOOC (which tends to be driven by video lectures), which assumes a fixed body of content like a more traditional online programme, assessment tasks would probably be optional and take the form of quizzes. For a cMOOC, with a more constructivist activity-based approach and more open -ended content, assessment will likely be optional and/or could take the form of open-ended projects with self-assessment rubrics which help the learners decide for themselves whether they have learned what they hoped to learn.
Discussion	The model is appropriate only for areas with reliable and affordable internet access and assumes high levels of learner autonomy and digital fluency. The model can also be used to augment the traditional classroom, for example for learners who feel overly constrained by the limited scope of the official school curriculum. There is need to train managers (to maintain the platform on which the MOOC is based) and teachers (to design the MOOC and possibly to mediate it in some circumstances). COL is currently offering a MOOC in Functional Numeracy in partnership with the University of the South Pacific, while a recently offered MOOC in Physics reached 43,000 learners.

Appendix 9.2: Example of a scaffolded assessment activity and associated rubric

Assignment

Purpose:

We know from feedback on the first survey that most of you have some experience of using some online tools and approaches to support learning during school closures.

This assignment is designed to help you to reflect on your experience to date. Completing the assignment will also help you to clarify what you hope to gain from Units 3 and 4 of the short course.

Time:

You will probably need 1-1.5 hours to complete the assignment.

Task:

Develop a lesson plan for how you will teach a topic in your subject without requiring learners and teachers to be in the same place at the same time.

Your plan should:

1. Specify the objectives/outcomes to be achieved.
2. Specify how much time learners will need to complete the lesson, e.g. 3 hours over the course of a week.
3. Specify the activities that learners should do and the resources they should use to complete them. There should be at least one learner activity for each phase of the lesson:
    a. Introduction
    b. Development
    c. Consolidation/conclusion.
4. Resources should be based on OER or open access content which has been duly acknowledged.
5. Provide preliminary ideas on how you will manage communication, assessment, and feedback.

A list of **optional additional resources** is provided to guide your planning (and/or for reference after completing the course).

Feedback:

Your assignment should be submitted on or before: June 01.

Feedback will be provided using the Rubric attached.

This is not a pass/fail assessment. Use the Rubric to self-assess. Then when you get feedback from a mentor you will have a basis for fruitful discussion during Week 4 of the course.

Certification:

Completion of this assignment is a mandatory requirement for certification at the end of the course.

There will also be a short quiz later to consolidate your knowledge.

Lesson Plan Rubric

Name:

Criteria	**Needs improvement (1)** **Competent (2)** **Exemplary (3)** **Score**			
Learning Outcomes	☐ Learning outcomes are stated but not easy to understand. ☐ Learners are given some information regarding what is expected of them. ☐ Learners are not given enough information to determine what they should know and be able to do as a result of learning and instruction.	☐ Learning outcomes are stated. ☐ Learners have an understanding of what is expected of them. ☐ Learners can determine what they should know and be able to do as a result of learning and instruction.	☐ Learning outcomes are clearly stated. ☐ Learners have a clear understanding of what is expected of them. ☐ Learners can determine what they should know and be able to do as a result of learning and instruction.	
Learning Strategies	☐ Some Learning strategies are appropriate for learning outcome(s). ☐ Some strategies are based on a combination of practical experience, theory, research and documented best practice.	☐ Most Learning strategies are appropriate for learning outcome(s). ☐ Most strategies are based on a combination of practical experience, theory, research and documented best practice.	☐ Learning strategies appropriate for learning outcome(s). ☐ Strategy based on a combination of practical experience, theory, research and documented best practice.	
Assessment	☐ Method for assessing student learning is vaguely stated. ☐ Assessment is teacher dependent.	☐ Method for assessing student learning is present. ☐ Can be readily used for expert, peer, and/or self-evaluation.	☐ Method for assessing student learning is clearly delineated and authentic. ☐ Can be readily used for expert, peer, and/or self-evaluation.	
Technology Used	☐Selection and application of technologies is beginning to be appropriate for learning environment and outcomes.	☐ Selection and application of technologies is basically appropriate for learning environment and outcomes.	☐ Selection and application of technologies is appropriate for learning environment and outcomes. ☐ Technologies applied to enhance learning.	

	☐ Technologies applied do not affect learning.	☐ Some technologies applied enhance learning.		
Content Required to implement Lesson	☐ Some materials necessary for student and teacher to complete lesson are listed, but list is incomplete.	☐ Most materials necessary for student and teacher to complete lesson are listed.	☐ All materials necessary for student and teacher to complete lesson clearly listed.	
OER	☐ There are no OER or Open Access materials in the lesson plan.	☐ The content includes at least one properly acknowledged OER or Open Access link.	☐ OER and Open Access resources are integrated throughout the lesson plan with appropriate acknowledgement.	

Open Educational Resources (OER) • Is the OER licensed for open use? (CC license for reuse, remix, revise, redistribution) • Is content adaptable or revisable? • Does the OER offer one to two rich practice exercises for complex content? • Does the OER provide appropriate	☐ OER is not licensed for open use; ☐ content is not adaptable and/or revisable; ☐ does not provide appropriate direction or scaffolding. ☐ OER lacks an appropriate number of exercises for mastery of elementary and complex content	☐ OER license is partially open; ☐ content is not easily adaptable and/or revisable; ☐ provides incomplete direction or scaffolding. ☐ OER offers an insufficient number of exercises for mastery of elementary and complex content	☐ OER is licensed for open use; content is adaptable and revisable; ☐ provides appropriate direction and scaffolding; ☐ offers clearly written, keyed, and scored exercises with documentation; ☐ OER offers appropriate number of exercises for mastery of elementary and complex content	

scaffolding and direction?				
Organization and Presentation	Lesson plan is organized, but not professionally presented.	Lesson plan is organized and neatly presented.	Complete package presented in well organized and professional fashion.	
General Comments				**/ 21**

Retrieved from- http://www.k12.hi.us/~paia/int/rubtem.html

General guidelines

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).

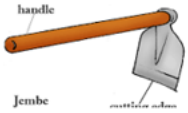
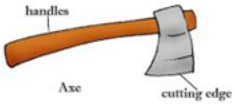
Appendix 9.3: Example OER

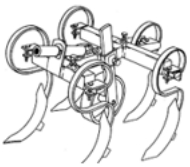
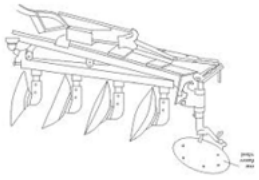
GROUP: PRE-VOCATIONAL EDUCATION

NAME: SALIHU IDRIS

TITLE: AGRICULTURE

TOPIC: AGRICULTURAL TOOLS AND EQUIPMENTS

RESOURCES:	Chart and visual material showing agricultural tools, equipment and how to maintain it after use.
ENTRY BEHAVIOUR	You have knowledge of what crude/local tools such as a cutlass and hoe are used for.
OBJECTIVES OR OUTCOME	By the end of the lesson, you should be able to: (a) Name farm tools (b) Identify and describe the tools and their uses. (c) Maintain the tools after use.
INTRODUCTION **CONTENT ACTIVITIES** **Purpose:** explain use of common tools **Time:** 15 mins	Task: Look at the pictures which show farm tools e.g. hoe, tractor, etc. Describe how the farm tools are used in your area
	Explain how the tools should be maintained Cutlass  Panga  Hoe Axe 
	Feedback: Typically, these tools are used for activities such as weeding and ridging. For effective maintenance, it is important that tools are cleaned after each use.
DEVELOPMENTAL ACTIVITY **Purpose:** identify other tools **Time:** 15 mins	Identify and name as many farm tools pictures as you can. Here are some examples …

	Knapsack Sprayer  Cultivator   Disc Plough
	Feedback: How many tools could you find pictures of and name correctly? Compare your examples with another learner or share them with an adult.
CONSOLIDATION **Purpose:** explain use of tools	Task:

Time: 15 mins	1. For each tool you identified in the previous activity, explain how it is used. 2. Explain how the tool can be maintained.
	Feedback: 1. Compare your ideas with those provided at: https://www.legit.ng/1186398-farm-tools-uses-pictures.html 2. Compare your ideas with those provided at: https://blog.agrihomegh.com/effectively-maintain-farm-tools/
SUMMARY	Farm tools and equipment include things like tractor, hoe, cutlass, axe, mattock, shovel, wheelbarrow, sprayer etc. Farm tools and equipment are used in different ways e.g. we use a hoe to make ridges or clear farmland. A cutlass is used for clearing trees. A tractor is used for clearing for planting. A sprayer is used for spraying herbicide on grasses so that the crop grows well. The maintenance of farm tools and equipment includes the following key activities: wash the tools and equipment. Oil the tools and equipment and clean the sand on the tools and equipment.
LICENCE REFERENCE	CCBYSA

Appendix 9.4: Example blended learning lesson plan

Lesson Plan

Name: Tony Mays Date: 31 July 2020

Criteria	
Learning Outcomes (What must they learn?)	By the end of the lesson, learners in Grade 6 English will be better able to: • Identify the key features of good short stories • Write good short stories in English • Share their created work under an open licence.
Learning Strategies (How must they learn?)	This lesson will involve: • Independent work • Peer review • Teacher scaffolding and feedback
Assessment (How will they/we know they have learned?)	Learners will submit a draft version of their story for peer review and a final version of their story for teacher feedback using an agreed rubric supplied in advance.
Technology Used (How will we communicate while physically distanced?)	SMS Email WhatsApp Internet Word-processor
Lessons phases incorporating: **Content Required to implement Lesson** **OER** **Organization and Presentation**	**What is communicated before the lesson?** **SMS:** Good morning. Please check your email for this week's lesson guidelines. **Email:** Lesson guidelines for Term 2, Week 4. **What are the key activities in the lesson:** ***Introductory activity*** Learners identify a short story they like. They share the title, author and reasons why they like the story in their WhatsApp group. ***Developmental activity 1*** Learners visit African storybook and choose one story they like: https://www.africanstorybook.org/, READ They self-reflect on the following questions in relation to both their own favourite story and the new story. 1. Who is the main character in each story?

	2. What is the problem/challenge/adventure experienced by the main character in each story? 3. How is the problem/challenge/adventure concluded in each story? 4. What is learned by the main character and reader from this experience in each story? ***Developmental activity 2*** Learners draft their own short story. It should have: • A main character • A problem/challenge/adventure • A conclusion • A key message. Learners share their short stories by email with another learner selected at random by the teacher. Each learner provides feedback on the following to their randomly selected peer: • All four elements of a good short story as noted above. • Any language / typo errors noticed. ***Consolidating activity*** Learners use the feedback provided by their peers to revise their story. Learners send the revised version of their story to their teacher by email at: assignments@RiverSchool.com Subject: Grade 6 English 2.4 Within 24 hours, the teacher provides feedback on the content and language of the story. ***Optional activity*** Learners have the option to submit the final version of their story for publication by revisiting: https://www.africanstorybook.org/, MAKE
	(This is what is emailed to the learners – what the teacher used to say in class now needs to be communicated differently. You did not need to do this for the assignment, but it is something you will need to think about in practice.) **Lesson Guidelines for Grade 6 English, Term 2, Week 4** Welcome to English Grade 6, Lesson 2.4. This week we are going to practise story writing. By the end of the lesson, you will be better able to:

1. Identify the key features of good short stories
2. Write good short stories in English
3. Share your story with others.

Time: Expect to spend about 3 hours on this week's work. The work should be completed before you come to campus on Friday where we will share and comment on your final stories.

Activity 2.4a
Purpose: to begin thinking about what makes a short story good
Time: 15 mins
Task:

1. Identify your favourite short story.
2. In your WhatsApp group share the following information:
    a. Name of your story
    b. Name of person who wrote the story or told you the story
    c. 1-2 sentences about WHY you like this story.

Feedback:
Comment on at least one person's post. Think about:
How many of you chose the same story? Did you give the same reasons?

Activity 2.4b
Purpose: to develop your thinking about what makes a short story good
Time: 30 mins
Task:

1. Visit the following website: https://www.africanstorybook.org/
2. Click on the READ icon.
3. Choose a story to read.
4. For your own story in Activity 2.4a and the new story, try to answer the following questions:
    a. Who is the main character in each story?
    b. What is the problem/challenge/adventure experienced by the main character in each story?
    c. How is the problem/challenge/adventure concluded in each story?
    d. What is learned by the main character and reader from this experience in each story?

Feedback:

You probably noticed that a good short story must have all the following elements:

1. A main character
2. A problem/challenge/adventure
3. A conclusion
4. A key message.

It also helps if:

5. The language is descriptive.
6. There is a picture (or more than one).

Activity 2.4c

Purpose: to draft a short story and seek feedback

Time: 1 hour

Task:

1. Plan and write your own short story of up to 500 words.
2. Check that your short story has all the main elements of a good short story:
    a. A main character
    b. A problem/challenge/adventure
    c. A conclusion
    d. A key message.
3. Check your language:
    a. Subject-verb concord
    b. Tense
    c. Spelling
    d. Vocabulary
4. You can use this rubric

	☹	😐	😂
Main character			
Problem etc.			
Conclusion			
Message			
Concord			
Tense			
Spelling			
Vocabulary			

5. Now email your draft story to one friend in your class for comment and feedback.
6. Provide feedback to your friend on their draft story.

Feedback:
Your friend should have given you feedback you can use to improve your story in relation to the 4 content items and the 4 language items.

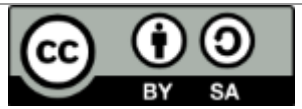
Activity 2.4d
Purpose: to revise and improve your short story
Time: 30 mins
Task:

1. Improve your short story using the feedback provided by your friend.
2. Now check that your short story has all the main elements of a good short story:
    a. A main character
    b. A problem/challenge/adventure
    c. A conclusion
    d. A key message.
3. Re-check your language:
    a. Subject-verb agreement
    b. Tense
    c. Spelling
    d. Vocabulary
4. Now email your draft story with your friend's feedback as well as your revised story to your teacher for assessment. You can send to:
    assignments@RiverSchool.com
    Use subject: Grade 6 English 2.4

Feedback:
Congratulations on writing a successful short story.
If you would like to, you can revisit
https://www.africanstorybook.org/
and Click on the MAKE icon to see if you can get your short story published.

Summary
A good short story, has:

	a. A main character b. A problem/challenge/adventure c. A conclusion d. A key message e. Accurate and descriptive language; f. Possibly a picture or two.



Appendix 9.5: Quality indicators for self-learning materials[8]

You can use the following indicators to assess the quality of materials designed for self-learning in a blended distance learning programme.

The quality indicators are divided into 7 broad categories

1. Introduction and orientation
2. Selection and coherence of content
3. View of knowledge
4. Presentation of content and interactivity
5. Activities, feedback and assessment
6. Language
7. Layout and accessibility.

1. Introduction and orientation

Orientation to programme, introductions, aims & learning outcomes

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 Programme and Paper. As learners, they need to be motivated by relevant introductions and overviews within each individual module/unit and how this relates to their professional development needs. 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 Paper and Programme.

- ☐ Is there an introduction to the Subject and to each Lesson?
- ☐ Does the introduction provide an overview of the Lesson?
- ☐ Does the introduction recognise and build from the assumed prior learning and experience of the teacher?
- ☐ Does the introduction locate the Lesson within the larger Subject?
- ☐ Is the overall workload required consistent with the credit rating and time commitment expected of the learners?

Additional quality indicators:

Orientation to programme, introductions, aims & learning outcomes

- ☐ Introductions to subjects/themes/lessons
  - o Explain the importance of the topic for the learner and create interest in the material
  - o Provide an overview of what is to come
  - o Forge links with what the learners already know and what they are expected to learn
  - o Point out links with other lessons/sections
  - o Provide some indication of intended learning outcomes in ways that are directly relevant and useful to the learners
  - o Give indications of how long the learner should spend on the material in the lesson so that the learners can pace themselves.

[8] Adapted from *Quality Criteria for Distance Learning Materials* developed by the South African Institute for Distance Education (Saide)

- Learning outcomes
  - Are stated clearly and unambiguously
  - Use active and assessable verbs
  - Describe what the learners need to demonstrate to show their competence
  - Are consistent with the aims of the Subject and Lesson
  - The content and teaching approach support learners in achieving the learning outcomes.

2. 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 Nigerian context. The learners should also be able to see how the content is related to the learning outcomes and goals of the paper and programme. Coherence is also important. If the components of a paper are contradictory or unrelated to each other, the impact of the programme will be considerably lessened.

- Is the content selected consistent with the National/State approved curriculum?
- Is it up-to-date with the most recent policy developments?
- Is it appropriate for the target audience of out-of-school-children?
- Is there appropriate cross-referencing between different Lessons and different Topics/Themes?
- Are references and source materials acknowledged properly?
- Are the references contemporary?

Additional criteria:

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

3. View of knowledge and use of learners' experience

In the Nigerian context, 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.

View of knowledge and use of learners' experience

- View of knowledge and RPL
  - Learners' own experiences and understanding are seen as valid departure points for discussion

- Knowledge is presented as changing and debatable rather than as fixed and not to be questioned
- 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
- Learners are helped to contextualise new knowledge appropriately and a concerted effort is made to empower learners to use theory to inform practice.

4. Presentation of content and interactivity

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. Content is presented as an ongoing discussion within which teachers are co-contributors.

- Is content presented in a way that assumes knowledge is constructed and contested?
- Does the material establish and maintain a dialogue with the teacher in the process of unfolding the content?
- Does the material create a friendly learning environment of collaborative engagement?

Presentation of content and interactivity

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

5. 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.

- Are there activities in each of the following categories?

- Self-study/self-reflection activities
- Classroom-based activities
- Study-centre-based activities
- ICT activities

- Are the activities practical?
- Do the activities contribute to the overall outcomes of the Lesson?
- Is the estimated time for the activities included and realistic?
- Is feedback provided and appropriate?
- Is the overall assessment strategy appropriate for a programme aimed at developing teachers able to engage in reflective teaching and learning?
- Will the overall assessment scheme require evidence of improved classroom practice and improved learner achievement?

Activities, feedback and assessment

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

- Feedback to learners
  - 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.

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

6. 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.

- Language level
  - New concepts and terms are explained simply and these explanations are indicated clearly in the text
  - The language used is friendly, informal and welcoming
  - Learners are not patronised or 'talked down to'
  - The discourse is appropriate to the learning intended
  - The language is sensitive as far as gender and culture are concerned
  - The language takes cognisance of the multilingual reality of Bihar State
  - The language is active and sufficiently interactive
  - A glossary is provided.

7. Layout and accessibility

Effective layout of printed materials maintains a creative tension between consistency and variety. It is important that learners can 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 using 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.

- Learning skills
  - Summaries and revision exercises are included at frequent intervals to assist the learners to learn
  - 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 [especially important in the early Lessons of a new Subject]

- Access devices (in texts; corresponding features will be looked for in other materials, e.g. videos)
  - The numbering/headings system makes it easy for learners to find their way through the text
  - The text is broken up into reasonable units

- 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.
- There is a contents page/easy to navigate menu
- Pre-tests are used wherever feasible to help the learners know what skills or knowledge they need to have before starting the lesson/section
- Links with previous knowledge and experience, with other parts of the same lesson and with other lessons are indicated.

- Visual aids (pictures, photographs, diagrams and cartoons) (in texts)
  - The visual aids used complement the written text
  - Line pictures, cartoons are well-drawn and appropriate for target learners. They are gender and culture sensitive.
  - 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.
  - Captions and explanations accompanying visual aids are adequate and give the learners a clear idea of what their purpose is.
  - Instructions/explanations accompanying diagrams are clear and learners know what they are expected to do.
  - Visual aids are well placed in the text.
  - Visual aids are of suitable size.
  - 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.