CPDC Implementation Model

# Structure of the CPDC

The structure of the CPDC is illustrated in the following diagram:



The programme comprises 9 modules in total, of which one is an orientation module for the whole programme. Teacher-educators will complete the orientation module, four core modules and one specialist module in order to fulfil the requirements of the Certificate. The expected total learning time is 220 hours over 2 semesters.

Note that specialist modules will not necessarily have six units but all will address the issues raised in the core modules within a specialist context. Since it will not be possible to cover every subject, or indeed any single subject in depth in this initial CPDC programme, specialist modules will explore selected topics and how these might be taught based on the approaches advocated in the curriculum reform and unpacked in the core modules.

The first cohort of teacher-educators will comprise volunteers who are willing to engage on the basis of a pilot, understanding that the programme and/or materials may need to be revised on the basis of experience.

Teacher educators will need to be **oriented** to the programme. This will entail:

1. A 1-hour briefing meeting in which a short PP presentation is made and teacher-educators receive the learning pack which will include a mix of printed copies, as well as a flashdrive with digital copies, of the following:
	1. Orientation module (print and digital)
	2. Schedule of contact sessions (digital)
	3. Four core modules with assignments (digital)
	4. Four specialist modules with assignments (digital).
2. Teacher-educators will then have two weeks in which to work through the orientation module and to select a specialist option.
3. There will then be a 3-hour registration and orientation contact session during which:
	1. There is a general discussion of the rationale for and design of the programme based on reading of the orientation module.
	2. The facilitator clarifies any issues regarding the programme design, approach, assessment and schedule of contact sessions.
	3. Teacher-educators register for a particular specialism and receive printed copies of the relevant five modules.
	4. There is agreement on the date of the first contact session.

# Contact sessions

There will be three contact sessions per module as follows:

1. Orientation
2. Maintenance
3. Consolidation.

## 2.1 Orientation

The first, orientation, session for each module should consist of a brainstorm or problem-solving activity aimed at surfacing what teacher-educators already know about an issue and identifying questions or areas for improvement and exploration.

There should be a quick overview of the content – looking at:

* Module outcomes
* Unit introductions and outcomes
* The assessment requirements.

The assessment requirements should be worked through together and unpacked. By the end of the first session, teacher-educators should be clear on what material needs to be completed before the following contact session and should be able to submit the first assignment by email ahead of or physically at the start of the second contact session. This first discussion should also explore and seek to reach a consensus understanding of the eportfolio which will run throughout the programme.

## 2.2 Maintenance

The second, maintenance meeting, for any module is concerned with checking progress and helping teacher-educators to help one another to solve problems. Typical activities for the maintenance contact session include:

* Feedback on Assignment 1 if this was completed prior to the session
* Pairs/teams working on and presenting a mind map summary of the key ideas in a particular unit
* Pairs/teams posing questions for other pairs/teams to try to answer.

By the end of the second session, teacher-educators should be clear on what material needs to be completed before the final session (preferably the whole module) and should be able to submit the second assignment by email ahead of or physically at the start of the second contact session. This second discussion should also explore and seek to reach a consensus understanding of how to write a critical reflection on the first assignment for inclusion in the eportfolio which will run throughout the programme. Groups might also agree on a schedule of micro-teaching or other demonstration/practice sharing presentations during the contact sessions.

## 2.3 Consolidation

The third, consolidation meeting, for any module is concerned with identifying key learnings and helping teacher-educators to help one another to solve problems. Typical activities for the consolidation contact session include:

* Feedback on Assignment 2 if this was completed prior to the session
* Pairs/teams working on and presenting a mind map summary of the key ideas in a particular unit
* Pairs/teams posing questions or creating scenarios for other pairs/teams to try to answer/address.

By the end of the third session, teacher-educators should be able to complete the third and final assignment for the module. This third discussion should also explore and seek to reach a consensus understanding of how to write a critical reflection on the second assignment for inclusion in the eportfolio which will run throughout the programme. Groups might also agree on a schedule of micro-teaching or other demonstration/practice sharing presentations during the contact sessions.

Depending on whether teacher-educators meet on a weekly or fortnightly basis and whether or not they are able to submit assignments by email in advance of the contact sessions or they submit physical assignments during a contact session, it could take up to 6 weeks to complete work on any one module as illustrated in the following slide:



## 2.4 Scheduling contact sessions

Different colleges may opt for different ways of organising contact sessions – either weekly or fortnightly. The following tables illustrate these scheduling options:

### 2.4.1 Weekly scheduling

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Orientation 1** |  | **Orientation 2** |  |  |
| **Week 1****CS1: 3 hours****Orientation to Module 1****Self-study 7 hours** | **Week 2****CS2: 3 hours****Submit Assign 1.1****Maintain M1****Self-study 7 hours** | **Week 3****CS3: 3 hours****Feedback Assign 1.1****Submit Assign 1.2****Consolidate M1****Self-study 7 hours** | **Week 4****CS4: 3 hours****Feedback Assign 1.2****Submit Assign 1.3****Orientate M2****Self-study 7 hours** | **Week 5****CS5: 3 hours****Feedback Ass 1.3****Submit Assign 2.1****Maintain M2****Self-study 7 hours** |
| Week 6CS6: 3 hoursFeedback Ass 2.1Submit Ass 2.2Consolidate M2Self-study 7 hours | Week 7CS7: 3 hoursFeedback Ass 2.2Submit Ass 2.3Orientate M3Self-study 7 hours | Week 8CS8: 3 hoursFeedback Ass 2.3Submit Ass 3.1Maintain M3Self-study 7 hours | Week 9CS9: 3 hoursFeedback Ass 3.1Submit Ass 3.2Consolidate M3Self-study 7 hours | Week 10CS10: 3 hoursFeedback Ass 3.2Submit Ass 3.3Orientate M4Self-study 7 hours |
| Week 11 (Sem 2)CS11: 3 hoursFeedback Ass 3.3Submit Ass 4.1Maintain M4Self-study 7 hours | Week 12 (Sem 2)CS12: 3 hoursFeedback Ass 4.1Submit Ass 4.2Consolidate M4Self-study 7 hours | Week 13 (Sem 2)CS: 3 hoursFeedback Ass 4.2Submit Ass 4.3Orientate M5Self-study 7 hours | Week 14 (Sem 2)CS: 3 hoursFeedback Ass 4.3Submit Ass 5.1Maintain M5Self-study 7 hours | Week 15 (Sem 2)CS: 3 hoursFeedback Ass 5.1Submit Ass 5.2Consolidate M5Self-study 7 hours |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Week 16CS16: 3 hoursFeedback Ass 5.2Submit Ass 5.3Outstanding questions from across the programmeSelf-study 7 hours | Week 17CS17: 3 hoursFeedback Ass 5.3Finalising professional portfolioSelf-study 7 hours | Week 18CS18: 3 hoursPresentation of portfolios for peer reviewSelf-study: finalisation of portfolios up to 7 hours | Week 19CS19 (optional)Assisting teacher-educators struggling to complete | Week 20CS20Graduation from CPD programme – awarding of CPD certificates endorsed by NCCE |

### 2.4.2 Fortnightly scheduling

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Orientation 1** |  | **Orientation 2** |  |  |
| **Week 1****CS1: 3 hours****Orientation to Module 1****Self-study 7 hours** | **Between sessions****Submit Assign 1.1 by email****Self-study 7 hours** | **Week 3****CS2: 6 hours****Individual and group feedback Assign 1.1****Submit Assign 1.2****Maintain M1****Orientate M2****Self-study 7 hours** | **Between sessions****Emailed individual feedback on Assign 1.2****Submit Assign 1.3 by email****Self-study 7 hours** | **Week 5****CS3: 6 hours****Group feedback Assign 1.2****Individual and group Feedback Ass 1.3****Submit Assign 2.1****Consolidate M1****Maintain M2****Self-study 7 hours** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Between sessionsIndividual feedback Ass 2.1 by emailSubmit Ass 2.2 by emailSelf-study 7 hours | Week 7CS4: 6 hoursGroup feedback Ass 2.1Individual and group feedback Ass 2.2Submit Ass 2.3Consolidate M2Orientate M3Self-study 7 hours | Between sessionsIndividual feedback Ass 2.3Submit Ass 3.1 by emailSelf-study 7 hours | Week 9CS5: 6 hoursGroup feedback Ass 2.3Individual and group feedback Ass 3.1Submit Ass 3.2Maintain M3Orientate M4Self-study 7 hours | Between sessionsIndividual feedback Ass 3.2 by emailSubmit Ass 3.3 by emailSelf-study 7 hours |
| Week 11 (Sem 2)CS6: 6 hoursGroup feedback Ass 3.3Submit Ass 4.1Consolidate M3Maintain M4Self-study 7 hours | Between sessionsIndividual feedback Ass 4.1 by emailSubmit Ass 4.2 by emailSelf-study 7 hours | Week 13 (Sem 2)CS7: 6 hoursGroup feedback Ass 4.1Individual and group feedback Ass 4.2Submit Ass 4.3Consolidate M4Orientate M5Self-study 7 hours | Between sessions Individual feedback Ass 4.3 by emailSubmit Ass 5.1 by emailSelf-study 7 hours | Week 15 (Sem 2)CS8: 6 hoursFeedback Ass 5.1Submit Ass 5.2Maintain M5Self-study 7 hours |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Between sessionsIndividual feedback Ass 5.2 by emailSubmit Ass 5.3 by emailSelf-study 7 hours | Week 17CS9: 6 hoursGroup feedback Ass 5.2Individual and group feedback Ass 5.3Consolidate M5Outstanding questions from across the programmeFinalising and presenting professional portfolioSelf-study 7 hours | Between sessionsSelf-study: finalisation of portfolios up to 7 hours | Week 19CS10 (optional)Assisting teacher-educators struggling to complete | Week 20CS11Graduation from CPD programme – awarding of CPD certificates endorsed by NCCE |

As can be seen, completion of the CPDC programme is anticipated to require 22 weeks over 2 semesters.

# Facilitation requirements

## 3.1 Philosophy and thinking underpinning the CPDC programme

The key focus of the CPDC programme is to facilitate real transformation in colleges and schools that is grounded in recognition of the challenges of particular contexts and the concerns underpinning the curriculum reform. Provosts, teacher-educators and teacher-students must understand that it is not acceptable simply to pay lip service to the ideas presented in the curriculum, to develop theories that are not implemented in practice or to adopt a minimal compliance stance. Instead, a deliberate attempt is made to encourage critical reflection on current practices, planning for improvement, action based on informed understandings and monitoring and evaluation that is critical and responsive. The assessment tasks set for teacher-educators in this programme must yield evidence that practice in colleges and schools has changed for the better in ways that reflect a commitment to and practice of the curriculum reform agenda.

## 3.2 Optimising contact support

### 3.2.1 Planning contact sessions

#### Key questions

Where and when will contact sessions be offered?

What should happen during these contact sessions to make the best use of the time available, taking cognisance of the collaborative learning strategies advocated in the programme decision?

Who will run these contact sessions and how will they be identified, inducted, trained, monitored and supported through the programme delivery cycle?

#### Discussion

It is expected that about 66 hours of contact-based support (30% of notional learning time) will be offered to teacher-educators over the two semesters of their part-time study.

Given that teacher-educators are all already in full-time employment, these contact sessions will need to happen after school hours, over weekends or during school holidays (and here care needs to be taken about possible clashes with other state training initiatives).

Experience suggests that teacher-educators will be willing to attend contact sessions if the dates are known well in advance so that plans can be made and if the venue is easy for teacher-educators to get to and from, especially those who are dependent on public transport. Teacher-educators will also be willing to return to contact sessions if they find them useful. However, 100% attendance is unlikely, so it suggested that contact sessions should not be the only means of communicating and discussing ‘new’ information. We should also try to keep in touch by email and sms.

Contact session venues need not be state-of-the-art. Often a college classroom is adequate provided the college and its classrooms are well-maintained.

It is important that tutors realise that they are working for the same national programme. They should not be introducing their own ‘additional’ materials and ideas during contact sessions but should rather be supporting and reinforcing the core programme materials and assessment tasks. Consideration will need to be given to the characteristics, skills and experiences of a ‘suitable’ tutor and plans made for recruitment, induction, monitoring and supporting of these local tutors.

The following scenario for a fictional college, the Chinua Achebe College of Education (CACE), illustrates some of the issues involved.

#### How CACE responded

*CACE discussed this issue with their State counterparts and it was agreed that as far as possible the ‘tutors’ on the programme would be drawn from circuit and district offices. The advantage of this is that monitoring and support for the programme could be more effectively integrated into the routine work of provincial officials and there would be an added HRD dimension to the intervention. In exchange for their extra work, the Provincial authorities agreed that CACE could pay the ‘tutors’ an honorarium for their services (per contact session and per script) and reimburse them for the cost of transport to and from centres and for their programme-related telephone expenses (a fixed amount).*

*In general, tutors needed to have qualifications at Masters level or above with some specialisation in curriculum management and practical experience in college level teaching. Tutors would not necessarily be experts in Educational Technology or Early Childhood Care and Education etc. The role of the tutor was seen to be to facilitate discussion of the issues discussed in the materials, to provide constructive feedback on assignment tasks and to escalate any unresolved conceptual problems to the module coordinator for resolution. Previous tutoring experience would be seen as an added advantage. Tutors who have not successfully completed an Assessment module during their education studies will be expected to register for and complete appropriate Assessor training. Their involvement in the programme will be deferred until this training is successfully completed.*

*Two members of the core team would be responsible for orientating the provincial tutors, leading marking sessions and visiting centres at random during contact sessions for quality assurance and support purposes. Contact sessions would be expected to take the form of group and plenary discussion based on engagement with the course materials and reflective accounts of experience from the teacher-educators. No lecturing of content was to be expected or desired.*

*It was further agreed that contact sessions would take place at a college central to each grouping of college clusters as identified by the State. This would mean that if there was 100% attendance, each tutor would be working with 30 teacher-educators in a classroom built to cater for 45 learners.*

*Tutor time commitment would therefore amount to:*

* *Orientation: 4 hours*
* *Preparation, facilitation and reporting on contact sessions: 33 hours + 66 hours + 20 hours = 119 hours*
* *Marking 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 2 x 189h or 3 x 126h*

## 3.3 General learner support issues

### 3.3.1 Open learning and adult teacher-educators

#### Key question

Teacher-educators will spend only about 30% of their learning time in institutional contact sessions as they are already in full-time employment. In addition, the teacher-educators are all adults and have many years of experience. This suggests that programme facilitators should be familiar with open learning, adult education and distance education principles. How will institutions provide for this need?

#### Discussion

The CPDC is designed for working adults. It seeks to open access to further professional development for educators who are already in full time employment. The advantage of this is that these adults are enabled to work and study at the same time and are immediately able to try out the things they learn in practice. The disadvantage is that they need to try to engage with their studies over and above their work, family and social commitments. This means that for much of the time, the teacher-educators are working independently. Although they are using learning resources that have been designed to facilitate independent learning, there will inevitably be concepts, tasks, challenges which they meet which could perhaps be more easily addressed in a more collaborative environment. Colleges will therefore need to think about how to address teacher-educator support needs between the formal contact sessions. Communication is clearly critical here and at the very least teacher-educators should be connected with their tutors by email and mobile phone.

#### How CACE responded

*CACE decided to include in its orientation some information on issues regarding the principles of open learning, distance education and adult learning and to include some discussion of the implications of these concepts for identifying and pro-actively seeking to address the potential learning needs of teacher-educators regarding academic, informational and personal support and counselling.*

*The programme team also decided that teacher-educators would need to be encouraged and supported in the formation and maintenance of study groups.*

### 3.3.2 Planning, facilitating and evaluating networking contact sessions

#### Key question

How will institutions not only maximise the use of institutional contact sessions but also encourage the formation of teacher-educator-led networking in college clusters etc.?

#### Discussion

Higher education generally does not have a good track record of retaining and graduating students. Where students repeatedly fail assessments in large numbers this is often taken as an indication of underpreparedness of students and the maintenance of high standards, rather than leading to questions about the appropriateness of the assessment tasks and the adequacy of institutions’ preparation of students for these tasks. We recognise that often students come into programmes with inadequate background knowledge and skills but we often neglect to adapt our fundamental modules/courses to try to address this need.

However, research suggests that we lose many students even before they submit assessment tasks, and this is particularly the case in part-time study. If teacher-educators do not feel supported in a continuous way, even a small problem may begin to feel like an insurmountable hurdle and they may lose motivation and drop out of the programme. This can in part be addressed by ensuring that contact sessions are spread throughout the year and that there is a continuous stream of communication through personal contact, SMS messaging and other forms of ongoing communication such as email and chatroom interaction.

However, one area that is often **not** exploited sufficiently is teacher-educators’ own knowledge and experience. After all, a programme like the CPDC is targeted at working adults. If teacher-educators are made to realise through the contact sessions that there is a lot that they can do to learn from and support one another, then there is a possibility that this kind of interaction will continue outside of the formal contact session. However, the formation and maintenance of an effective study group is not a simple thing and teacher-educators will usually need some guidance in this area.

#### How CACE responded

*In the longer term, CACE decided to focus its marketing and recruitment strategy at College Departments as a whole so that in the ideal situation no teacher-educator would be working alone in any particular department or faculty.*

*In the shorter term, the CACE team decided to devote some time during the first contact session to identifying and forming geographically organised study groups and to support these groups by providing some guidelines in their programme tutorial letter.*

*In addition, it was decided that the formal contact sessions would involve a lot of group discussion of case studies, scenarios and experiences and open-ended responses and that teacher-educators would be constantly encouraged to engage critically with the learning material and to provide additional and even alternative strategies to those suggested. It seemed clear to the team that their tutor training sessions would need to incorporate some discussion about facilitation methods. It was also decided that tutors should write a short report after the contact sessions that would summarise some of these discussions and experiences discussed so that they could be integrated into the revised materials.*

### 3.3.3 The tutor as a counsellor

#### Key question

Higher education generally is currently characterised by low retention and high drop-out figures. It is believed that one of the major causes for this is personal and/or family problems which cause students to lose motivation. How will institutional staff be equipped to play a motivating and/or counselling role? What additional support facilities will teacher-educators have access to?

#### Discussion

Traditionally, teachers and tutors have seen their role as being mostly about dealing with the academic problems of students. However, there is an increasing awareness that teacher-educators encounter non-academic problems which they may want to discuss with their facilitator. The kinds of issues that arise stem from the fact that these students are often trying to juggle family, career and study commitments and may range from inability to manage their time, or lack of an appropriate work space to traumatic events such as the death of a loved one.

Again, our first piece of advice here is for staff to listen. Often all that teacher-educators need is a sounding board and an opportunity to vent their frustrations. We suggest that staff avoid making judgements or giving advice. Most staff are not trained counsellors or specialists in all the different areas that a teacher-educator may be encountering problems with. If necessary, they should refer the teacher-educator to someone who is qualified to help them – a social worker, a priest, a clinical psychologist etc.

However, there are some issues that from experience we know come up time and again and for which programme staff should be prepared to help. These are issues to do with teacher-educators’ doubts about their own abilities, their motivation to succeed and their ability to manage their time and workspace.

#### How CACE responded

*CACE decided to devote a discussion to counselling as part of its tutor/mentor training (what had started out as a 1-day orientation was now shaping up as a 5-day workshop).*

*With regard to these issues, CACE advised their tutors/mentors as follows:*

* *deal sensitively with teacher-educators’ doubts and concerns and respond to problems that can be dealt with (course related) and refer them to specialists where you are not qualified to help;*
* *encourage and motivate teacher-educators in all that you do – by providing constructive feedback, recognising good work and effort, actively using the teacher-educators’ own experiences, expertise and problems as the launch pads for discussion and keeping clear in everybody’s minds the value of successfully completing the CPDC programme;*
* *help teacher-educators to organise their study space and time management (time spent on this at the beginning of the year can save a lot of wasted time later).*

*One of the areas in which you can combine a motivating, academic and professional development agenda is in the way in which you give feedback on assessment.*

### 3.3.4 Providing feedback on assessment

#### Key questions

Given the relatively limited direct contact with teacher-educators, feedback on assessment will be a particularly critical aspect of the programme.

How will institutions communicate feedback to teacher-educators?

What training/support will assessment staff receive in providing assessment feedback?

How will marking and assessment be standardised and monitored?

#### Discussion

The provision of feedback on assessment is a critical aspect of the constructivist nature of the CPDC programme. It is vitally important at the beginning of the programme to review the learning outcomes and assessment requirements that inform each module of the CDPC programme. It will be necessary to return to these often as the teacher-educators work through the programme so that everybody is constantly informed by the purpose and intent of the programme.

Each module will have three assignments that need to be completed and submitted for assessment. It is important that these are discussed before teacher-educators attempt them and again after they have attempted them. No teacher-educators should have to ‘guess’ what the task requires or how it will be assessed. Given the limited nature of the face-to-face contact that tutors will have with teacher-educators, the written feedback that markers provide on their assignments becomes all that more critical.

Using the key assessment tasks as a teaching tool in this way can help to:

* consolidate learning
* check progress
* provide academic support
* motivate
* contribute to ongoing course development (if ALL the teacher-educators have problems, perhaps the task itself is inappropriate or inadequately scaffolded).

Ideally, to ensure consistency of assessment across the programme, all assignments would be assessed through group marking strategies.

#### How CACE responded

*As noted previously, the CACE team had already decided to design down in formulating their assessment tasks. The exit level tasks would be formulated first and would be structured in such a way as to elicit evidence of competence in line with the overall programme design. Then the team would interrogate the contribution that each module could make in enabling the integrated eportfolio. Module-specific assignments would then be structured in such a way that they would address both the issues in the module and also build cumulatively the skills, knowledge, attitudes and values needed to meet the overall programme outcomes and the eportfolio assessment requirements..*

*Each assessment task would detail the assessment criteria and for each task teacher-educators would be expected to complete a self-assessment and a peer-assessment (by another teacher-educator) form. Tutors would then mark assignments in College and State marking groups under the leadership of two of the core CACE programme team members. Where the tutor marking differed from the self- and peer-assessment, or where all three assessments resulted in a low achievement rating (2 or less), extensive feedback would need to be provided and the teacher-educator would be given three weeks in which to re-submit.*

*The following guidelines were agreed overall:*

* *develop a system for giving feedback that is consistent across all the assessment tasks and easy to understand*
* *make comments that demonstrate that you have read the assignment and are maintaining a dialogue with the teacher-educator*
* *make comments which indicate errors or simple misunderstandings of the course material with reference to the course material, so that teacher-educators can check and make their own corrections*
* *make comments about the relevance or approach used by the teacher-educator*
* *make comments which offer support and encouragement (even if the teacher-educator is not doing well)*
* *make comments on assignment-writing skills and integrate advice on study skills and strategies*
* *make comments which explain the grade/mark/classification that they have been given*
* *make a general comment at the beginning or end as well as specific comments next to relevant sections of the assignment itself*
* *develop a system for correcting language errors.*

### 3.3.5 Monitoring teacher-educator progress

#### Key questions

How will institutions monitor teacher-educator progress?

In particular, how will at-risk teacher-educators be identified early in the process and how will additional support for these teacher-educators be mediated?

#### Discussion

There are a number of reasons for integrating assessment into our learning and teaching activities and these include providing us with feedback on the effectiveness of the programme and our own interventions and also helping us to monitor our teacher-educators’ progress.

There is no reason why all the teacher-educators on the CPDC programme should not be successful. However, some may take longer than others and some may need to make more than one attempt.

A lot of this monitoring will happen informally during networking contact sessions as tutors observe, listen to and engage with teacher-educators’ discussion of activities and problems. For this purpose it is a good idea to have a notebook to hand in which to jot down short reminders e.g. ‘Ibrahim seems unsure about OER’. ‘Mirriam gave a good example of how she manages the school timetable’. After reflection, these comments could affect how staff engage with these teacher-educators and the learning activities in future sessions.

Clearly we also need to keep track of who is submitting their assignments for assessment and how are they are doing and (re-)designing our interventions accordingly.

Monitoring teacher-educator progress is an important part of the work of the tutor. Timeous submission of completed marksheets and comments on any emerging trends or problems can make the difference between a successful and an unsuccessful programme.

#### How CACE responded

*CACE decided that deadlines would be set for all assessment tasks and communicated to teacher-educators both in the programme tutorial letters and during the contact sessions. In addition, reminders of assignment deadlines (and contact session dates) would be sent out using bulk SMS messaging.*

*After each contact session, tutors would be expected to follow up telephonically on those teacher-educators who did not attend.*

*After each marking session, tutors would be expected to follow up telephonically on those teacher-educators who did not submit an assignment or who did particularly poorly and who needed to resubmit.*

# Integration of technology

A central thrust of curriculum reform in most countries, including Nigeria, is to progressively leverage the potential of educational technology to enhance teaching and learning. This is the reason for including a module on this in the CPDC programme and for seeking to integrate educational technology and internet-based resources into the CPDC programme. However, we recognise that access to devices, software and internet connectivity and the skills to use ICTs are extremely variable.

Providing learning materials in both print and digital format allows teacher-educators to work both off- and on-line. When on-line, they can follow the links in the digital resources. When off-line they work through the materials in print format and/or by saving the digital versions to a preferred device such as a tablet or laptop.

It is suggested that where possible, assignments and feedback thereon, are mediated with individuals through email. Contact sessions can then focus on discussion of trends and issues across the learning group.

It is further suggested that each tutor and his/her teacher-educators should exchange mobile phone numbers. This will facilitate contact between sessions by sms e.g. reminders of assignment deadlines and contact session times and, where necessary, by calling e.g. to discuss lack of attendance, non-submission or poor performance on an assignment.

Given that this CPDC programme is inevitably only the first of many such initiatives and given that access to and ability to use educational technology will improve with time, thought might be given in the medium to long-term to developing a learning management system for CPD courses. An increasing number of institutions are making use of Moodle for this purpose.