Cambridge International
Diploma
in
Teaching with ICT

PLANNING

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Dear colleague

I am very happy to welcome you to the University of Cambridge International Examinations (CIE) and to the Cambridge International Diploma in Teaching with ICT.

CIE is the world's leading provider of international qualifications and assessments. We have a broad range of qualifications, created for an international audience, and recognised by universities, education providers and employers across the globe. As part of the University of Cambridge, CIE has a strong pedigree in development and research. We constantly review our provision and introduce new subject areas and qualifications. We also strive to improve the support we offer our network of registered Centres and utilise innovative technology for delivery, assessment and administration.

Since 2000 we have worked with colleagues in the world of education to develop a Professional Development Diploma specifically focused on the use of ICT to support teaching and learning which is as relevant, reliable and rewarding as possible. The Diploma is a practice-based qualification. It is based on the clear specification of global performance standards for the key stages in teaching with ICT: design, management (which comprises practice and assessment) and evaluation. The assignments enable candidates to demonstrate, in the context of their professional work, that they can meet these standards. The Diploma certificates and celebrates their success.

The Diploma is going from strength to strength. Teachers are benefiting from quality professional development in Diploma Centres in various parts of the world. Our resources provide support to candidates and their trainers. It is very encouraging, and often inspiring to read Diploma assignments. They have come a long way in their thinking and their practice through their experience of the Diploma. They are developing rich insights into teaching and learning. They are excited about the future. They are becoming truly reflective practitioners.

We have produced this handbook to help Programme Leaders and their colleagues design and manage successful Diploma programmes. 'Success' can be measured in many ways. For us, the most important measure is that the Diploma should really enrich the process and enhance the outcomes of teaching and learning.

Thank you for your interest in the Diploma. I do hope that you and your colleagues will also enjoy and benefit from the Diploma and I look forward to us helping you along the way.

Kind regards

Paul Beedle

Dr Paul Beedle
Manager, Professional Development Certification
CIE

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Contents

Please note:

This booklet is bookmarked. You can click on the Bookmarks tab on the left hand side of the page and this will bring up a list of all the important parts of the document. Then click on the part you would like to see, and you will move there instantly. To hide the bookmarks margin simply close the tab.

You will also find that the Contents page and pages in this booklet have linked page numbers:

- On the Contents page, you can move instantly to a page of your choice, simply by clicking on the page number

  e.g. 43

- From any page in the booklet, you can return instantly to the Contents page by clicking on the page number at the bottom of the page.

We hope that these facilities will make the booklet as easy to use as possible.

SECTION 1

How the Diploma in Teaching with ICT Works

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Functions of a Diploma Centre

Centres are responsible for

- Ensuring the quality of professional development experiences and programme(s) leading to the Diploma.

  The Centre provides the Diploma programme – which may involve some support from external agencies e.g. a local teacher training institution. We encourage Centres to use the resources from CIE as much as possible.

- Providing the personnel who design and manage the Diploma programme, and who train candidates in the skills and knowledge required by the Diploma.

  While the roles need to be clearly defined (e.g. the Programme Leader), we do not expect these to be full-time. Members of the team involved with running the Diploma can have more than one role to play, e.g. the same person may be involved as trainer and as performance observer.

- Giving appropriate support to candidates as they prepare the assignments for the Diploma.

  Support needs to be both to the group and to individuals, making the most of the experience, expertise and interests of staff within the Centre and the opportunities in practice for learning from each other.

- Managing sufficient and appropriate facilities for the Diploma programme.

  Given the size of the Diploma group in the Centre and mode of operation, these facilities need to meet the needs of candidates and trainers, e.g. a learning environment which accommodates active learning using a range of approaches.

- Following the administrative procedures given by CIE for the Diploma.

  CIE gives clear instructions and the Centre needs to ensure that candidate entries and assignments are completed and submitted according to these guidelines.

Centre eligibility

The Diploma in Teaching with ICT can only be run at Centres that have fulfilled CIE's requirements and received confirmation of their eligibility from CIE.

We expect Centres expressing interest in becoming Diploma Centres to have thoroughly read the information about the Diploma available on the CIE website, such as the FAQs and the documents on the Resources page e.g. the syllabus. Please check the appropriate pages linked to

http://www.cie.org.uk/qualifications/teacher

Once you have expressed your interest in offering CIE's Professional Development Qualifications, e.g. by completing and submitting the online enquiry form, you will be contacted by our Centre Support team with more details on how your Centre can become eligible. To summarise the process:

- A specific eligibility questionnaire will be sent to you by email asking for details on how you propose for the qualification programme to be run at your Centre.

- You should nominate one Programme Leader who will need to complete and submit the questionnaire to CIE.

- Based on the information provided in the questionnaire CIE will make a decision on your application to offer CIE's Professional Development Qualifications. You may be asked to provide further information at this point and revise and resubmit the eligibility questionnaire.

- You will be notified in writing that your Centre is granted provisional eligibility to offer CIE's Professional Development Qualifications. You will also be sent information on how the nominated Programme Leader should enrol on the Programme Leader Online Self-Study Course.

- On successful completion of the Programme Leader Online Self-Study Course, you will be notified in writing that full eligibility has been confirmed for your Centre to offer CIE's Professional Development Qualifications. Your Centre will then be able to make assessment entries and supporting resources will be made available on CIE Direct.

Institutions wishing to gain eligibility to become Diploma Centres need first to have completed their Centre registration. Please see

http://www.cie.org.uk/aboutcie/centres

The following diagram summarises the key steps in becoming a Centre for the Diploma.

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1 Read the relevant information on the CIE website

2 Express interest to CIE in becoming a Centre

3 Complete and submit the centre eligibility questionnaire

4 Receive provisional eligibility and enrolment information for programme leader online course

5 Programme leader completes online course and is accredited by CIE

6 Eligibility confirmed and access to CIE Direct folder

7 START the programme

Diploma resources from CIE

CIE provides the following resources for the Diploma

Resource	*Purpose*
SYLLABUS	Sets out the performance standards and assessment guidelines
SAMPLES	The sample assignments indicate the nature of the evidence for assessment
PLANNING	This booklet provides guidance on how to design and manage a Diploma programme
GUIDE	Provides learning materials for use in programmes
MANUAL	Sets out the administrative procedures to be followed
TOOLKIT	Contains assignment template, entry sheet and forms to be used in administration

The documents are made available stage by stage, to coordinate with the process of Centre eligibility and programme leader training, as follows:

Stage 1   (Centre interest and application)

On CIE's public website, at

http://www.cie.org.uk/qualifications/teacher/level2/dipict//index_html

- You will find the *syllabus*, *sample assignments*, *handbook* and *resource list*.

Stage 2   (Provisional eligibility and Programme Leader training)

- On the online course for Programme Leaders, as well as working with this Handbook, you will be introduced to key points in the *Guide*, the *Manual* and the *Toolkit*.

Stage 3   (Confirmed Centre eligibility and Programme Leader accreditation)

- On CIE Direct, you will find all the current versions of the Diploma documents in the Support Materials folder for the Diploma.

The Guide provides advice and guidance on key points in the syllabus, readings, and case studies.

We have made sure the Guide corresponds to the syllabus and the assignment, and is easy-to-use and useful for candidates and trainers. We recommend you make as much use of the materials in the Guide as possible. The materials are generic in nature. You will adapt these materials where necessary for your context and for the needs of your candidates.

The Resource List recommends a small number of readings and websites, which we think are generally relevant. As an introductory programme, the Diploma should involve an appropriate, manageable amount of time for the candidate in reading, research and reflection.

We assume you will also yourselves develop and provide suitable professional development materials and activities, to blend with the CIE resources. You will already have your own resources to hand and can develop new resources as necessary. We encourage you to be creative in finding and developing your use of resources.

Please make sure you and your candidates are thoroughly familiar with the **syllabus** and the **assignment templates**. The syllabus is the prime resource for the Diploma. The syllabus and assignment templates are the universal constant reference points for everyone involved in the Diploma.

The Diploma route map

While each candidate's and Centre's journey to the Diploma is going to be in some way(s) special and unique, there are essential milestones for all to pass on their journey.

These are, in sequence:

1. Becoming thoroughly familiar with the Diploma syllabus and its requirements.

2. Planning and preparing the Diploma programme that is best for the Centre and its candidates.

3. Carrying out this programme, making the most appropriate use of the CIE resources and combining these with local activities and resources developed and provided by the Centre.

4. Completing, submitting and passing the Diploma assignments.

5. When all four modules have been completed successfully, CIE issues certificates, stating the grade achieved (Pass or Distinction).

6. But certification is not the end of the journey, either for the individual or the Centre. The next step in the reflective cycle is evaluation – of the individual experience of the Diploma, of the effectiveness of the Diploma programme as currently designed, and of the way in which it is managed.

7. Evaluation thus leads on to the next round of professional development – for the individual the most appropriate next step in continuing professional development and for the Centre the start of a new (and improved) Diploma programme.

The following diagram presents this route map for the Diploma journey.

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                    SYLLABUS

              PROGRAMME DESIGN

         PROFESSIONAL DEVELOPMENT
            • FORMAL ACTIVITIES
            • INFORMAL ACTIVITIES
            • SELF STUDY
            • PRACTICE / EXPERIENCE

                 ASSIGNMENTS

                 CERTIFICATION

                  EVALUATION

       FURTHER PROFESSIONAL DEVELOPMENT
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Programme Leader – profile and role

Every Diploma Centre must have a **Programme Leader**. Through the online self-study course provided by CIE, s/he will receive training and be accredited as a programme leader for the Diploma. This is to help ensure that each and every Centre for the Diploma is upholding a consistent quality standard.

The Programme Leader in the Centre is pivotal to the success of the Diploma programme.

CIE will communicate directly with the nominated Programme Leader in the Centre about Diploma matters.

Profile

The Programme Leader should have:

- Minimum of 5 years' practice as a teacher or trainer, holding appropriate (national) qualification

- Minimum of 2 years' responsibility as a team leader for other teachers/trainers

- Current responsibility for organizing professional development activities for colleagues and/or teacher/trainers attending the Centre's programmes.

Role

The Programme Leader is required to:

- Design and manage the Diploma programme(s) in the Centre so that individual and institutional needs are fully met

- Communicate all CIE information about the Diploma to candidates and colleagues involved in their support, so that they fully understand the Diploma requirements

- Coordinate candidates' professional development and their preparation of assignments to meet the performance criteria and assignment guidelines

- Ensure that the work contained in every candidate's submission is complete and authentic

- Ensure that the entry documentation is complete and correct

- Manage the attendance and work of other trainers, mentors and visiting speakers as necessary.

As you can see, the Programme Leader is not alone in the Centre – s/he is very much a team leader. In a Centre which also runs the Certificate for Teachers and Trainers s/he may be the Programme Leader in charge of the Certificate programme – but this is not essential.

Only the Programme Leader is required to complete successfully the online self-study course, and should share the knowledge gained from the course with the rest of the programme team in the Centre.

Contacting CIE

CIE Customer Services is a team of staff dedicated to providing quick and accurate responses to customer enquiries. The team is able to receive enquiries from Centres submitted by telephone, email, fax or letter and aims to respond to all enquiries within 2 working days of receipt. Customer Services may be able to provide an answer to your enquiry immediately, e.g. if you want to know the current entry fee for the Diploma. Otherwise they will forward your enquiry to the appropriate manager in CIE, e.g. the Product Manager for the Diploma, and your enquiry will be given priority.

The Customer Services team can be contacted between 8.00a.m. and 5.00p.m. (UK time) Monday to Thursday and 8.00a.m. and 4.00p.m. on Fridays.

By telephone, CIE Customer Services should be contacted on +44 1223 553554. To help us to provide a response to your enquiry you will be asked for your Centre number, your name and the nature of your enquiry. For enquiries about the Diploma in Teaching with ICT, please refer to the syllabus number: **8995**.

By email, Centres may send enquiries to international@cie.org.uk In order to ensure that your queries are dealt with promptly it is essential that you include your Centre number in the Subject Title of the email. You should also include the following information in the text of your message:

- Centre name and number
- Name of member of staff sending the message.

Faxes should be sent to CIE Customer Services on +44 1223 553558. You will need to provide:

- Centre name and number
- Name of member of staff sending the message.

Letters from Centres to CIE should normally be signed by the Head of Centre or designated deputy and addressed to:
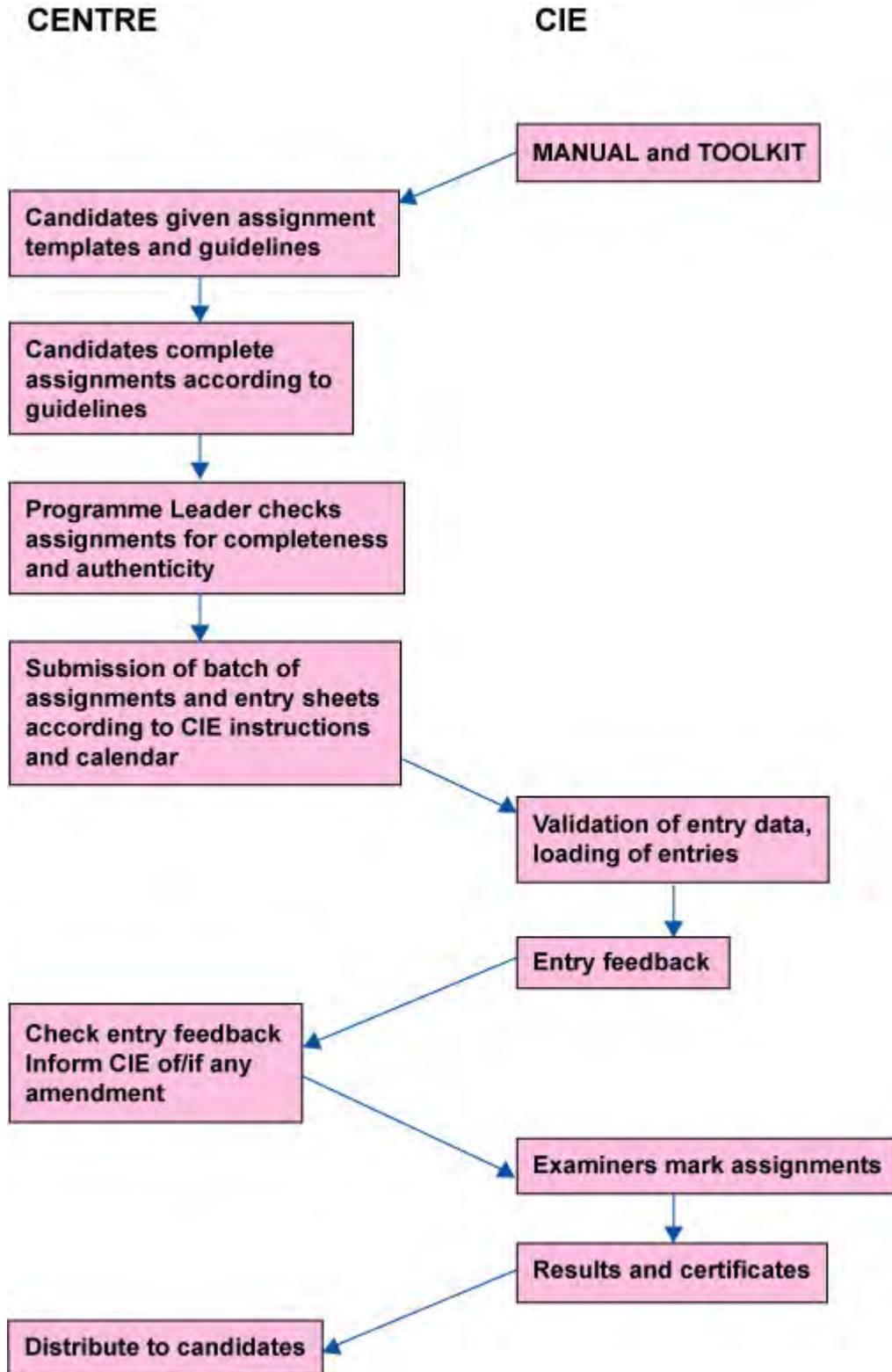
Customer Services
University of Cambridge International Examinations
1 Hills Road
Cambridge
CB1 2EU
United Kingdom

Candidate registration and assignment submission

One of the important aspects of the role of Programme Leader is to make sure that candidates are registered with CIE, and their assignments are submitted correctly according to the instructions given in the Manual and the Toolkit, e.g. assignments must be completed using the electronic assignment template provided in the Toolkit and submitted together with the candidate entry sheet via CIE Direct.

The diagram on page 19 presents an outline of the process.

Given that these and other essential operations are carried out using information and communications technology (ICT), Centres need to have the appropriate ICT facilities for staff and candidates, and the Programme Leader, the Diploma team, and candidates should be comfortable with using ICT (but do not have to be expert users).

CENTRE

CIE

MANUAL and TOOLKIT

Candidates given assignment templates and guidelines

Candidates complete assignments according to guidelines

Programme Leader checks assignments for completeness and authenticity

Submission of batch of assignments and entry sheets according to CIE instructions and calendar

Validation of entry data, loading of entries

Entry feedback

Check entry feedback Inform CIE of/if any amendment

Examiners mark assignments

Results and certificates

Distribute to candidates

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SECTION 2

How to design
your Diploma programme

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Types of Diploma Centre

There are three kinds of Centre eligibility. For ease of reference we have assigned geometric shapes to these, e.g. when we describe suggested standard programmes in Section 3.

1. In-house only – the **Δ** Centre

- Many of our Centres are located in an individual institution, e.g. a school, college, or company, which runs the Diploma programme only for its own staff.

- For ease of reference we refer to this Centre as a **Δ** ('triangle') Centre.

- A Programme Leader is nominated. The Programme Leader will be responsible for setting out, directing, arranging and administering the Diploma as indicated in this Planning booklet and as required by the Diploma syllabus.

- The Centre can design and manage its own Diploma programme for Diploma candidates perhaps based upon the sample programme in this Planning booklet.

- Arrangements for mentoring and pair/group work are often easier to set up in a **Δ** Centre as those involved often know and work with each other and share a common work location. There are still opportunities to break up the familiar groups (organized by subject, faculty, age or experience) and this provides different working and study relationships.

- Note, too, that there are plenty of possibilities for 'branching out'. Visits to other Centres, schools, colleges and university departments can be arranged for interested groups or individuals. There may also be great value in attending exhibitions, conferences and seminars and arranging joint working with other educational institutions.

2. The training provider – the ◇ Centre

- Many of our Centres run the Diploma as an external programme for teachers and trainers. These programmes may be general, so that groups are of mixed background and working context, or specialised, perhaps tailored to a particular phase of education (e.g. primary or secondary education) or industrial area (e.g. construction or health and social care).

- These programmes are commercial, the participants and/or their sponsors paying programme fees to the Centre.

- For ease of reference we refer to this type of Centre as a ◇ ('diamond') Centre.

- A Programme Leader is nominated. The Programme Leader will be responsible for setting out, directing, arranging and administering the Diploma as indicated in this Planning booklet and as required by the Diploma syllabus.

- The Centre can design and manage its own Diploma programme for Diploma candidates perhaps based upon the sample programme in this Planning booklet.

- The size of ◇ Centres ensures a rich diversity of Diploma candidates. This diversity almost guarantees lively responses to activities and the promise of many new friendships in the making!

- ◇ Centres can employ the full range of methods for programme implementation and may already act as storehouses of experience and expertise and valuable sources of encouragement and inspiration.

- ◇ Centres may well become pro-active in organising conferences, exhibitions and events based on and around Diploma work.

3. The education authority – the ★ Centre

- As the Diploma is becoming established as a leading international qualification for continuing professional development, a number of education authorities are using the Diploma in official training projects for teachers/trainers in institutions under their authority.

- The planning and management of the Diploma, as a key part of these large-scale and long-term projects, is particular to each project.

- For ease of reference, we refer to this type of Centre as a ★ ('star') Centre.

- Typically, CIE and ★ Centres work in partnership on the detailed planning and delivery of the Diploma in each project.

- In the rest of this Planning booklet, we focus on **Δ** and ◇ Centres.

Centre management – working as a team

- Even in smaller Centres it makes good sense for the Programme Leader to act as a team leader, however informal that team might seem to be.

- It is entirely up to you how you set up this working group, which roles you allocate to whom, and how often you meet.

- We are none of us indispensable and so it is a good idea to have someone to 'shadow' you who at least knows what is going on and can cover in an emergency, share some of the work and act as a source of help and advice.

- You can also identify and involve the following people/roles:

  o **Trainers** with appropriate experience and skills who can lead and help with workshops and activities in the Diploma in Teaching with ICT Programme.

    The most experienced teachers may not necessarily themselves be the most effective trainers. Open-mindedness, ability to communicate with a wide range of people, understanding of adult learners, and enthusiasm are just as important as 'pedagogic knowledge'.

  o **Observers** who can attend Learning Sessions as required by the Diploma syllabus.

    These should be senior professionals, preferably those who have undertaken this kind of task before. They need to be supportive, objective and able to provide helpful feedback. We have included advice about Performance Observation below.

  o **Visiting speakers** who can make presentations, stimulate discussion and respond to questions.

    Using visiting speakers is just one example of how Diploma programmes themselves should embody a wide range of teaching and learning approaches.

- There may be other roles which are relevant to your approach to the Diploma. For example, you may decide with your colleagues that each candidate is assigned a mentor. Such a mentor will be a more experienced colleague, already having the skills and knowledge defined in the Diploma, who can provide constructive advice and guidance along the way.

- In the early stages of introducing and establishing the programme you may find yourself tackling all or most of the above roles but it will enhance the quality of the programme offered by the Centre if you can attract others to help you with your work.

- The presence of a strong team will enable you to add diversity, quality and improvements to the programme(s) you offer.

Ten important programme planning considerations for any Diploma Centre

1. **Access to resources**

    Check candidates' access to relevant professional development resources e.g. CIE resources, the Internet, PC (with 'office-type' suite), books and other reading matter.

2. **Access to the programme**

    How easy/difficult will it be for candidates to participate in Centre-based Diploma activities? What kind of commitment will be required of them e.g. time, money, resources? Are any sources of funding available?

3. **Times and venues**

    You will need to establish a time frame of training, study and activities based on your programme plan.

4. **Travel and accommodation**

    Centres with candidates who are widely geographically spread will need to look at these issues. They may have a serious impact on the length and frequency of training sessions.

5. **Supply of trainers**

    These may be selected, recommended or requested, volunteers or contractors but they must all be acquainted with the purpose and demands of the Diploma and the CIE standards involved.

6. **The Diploma modules**

    Note that candidates may work at their own pace through the Diploma modules and may join your Centre at different times. So your training provision must be as flexible as possible.

7. **Module requirements**

    Make sure you are thoroughly familiar with the overall requirements of the assignments as given in the introduction to the assignment guidelines in the syllabus e.g. about the size of the learner group and the number of learning sessions.

8. **Links with CIE**

    Don't forget our website, and follow links provided!   www.cie.org.uk

9. **Programme plans**

    Use our standard programme plans below by all means but don't be afraid to build upon them to suit your needs and the needs of your candidates.

10. **Build on any previous experience**

    You may have accumulated experience of good practice from other programme-building exercises – don't be afraid to use this in the Diploma!

Programme planning

> You should follow the principles and practice of the Diploma when you are designing your Diploma in Teaching with ICT programme! All the advice and guidance about programme planning, management and evaluation contained in the syllabus, the Guide is just as relevant to you!

Each of the three modules of the Diploma is divided up into a number of steps (performance criteria). Each of these steps requires candidates to demonstrate skills, knowledge and understanding. Structured activities will provide candidates with opportunities for putting their research into practice then to reflect upon its impact upon teaching and learning. You will find the clear framework of the Diploma syllabus and the assignments helps you to plan, manage and evaluate. The specification of performance criteria correspond to the natural sequence of teaching. The assignments are based on this step-by-step sequence. You can safely plan the content and sequence of your programme using this step-by-step sequence, thus keeping pace with and making the most of your candidates' practice.

Let's have a look at each of these modules in turn.

1.   Planning to Use ICT in Teaching and Learning

If you are a **Δ** Centre, your learners are going to be your colleagues. Of course you know them well! But do you have a clear and accurate picture of how they might begin to plan for an ICT related activity within a teaching and learning context? Do your colleagues actually have sufficient opportunities for using ICT within a teaching and learning context with real learners? Don't assume, find out properly, carefully and thoroughly. One exercise that you may carry out in your institution is an audit to ascertain ICT knowledge and skills amongst your colleagues, using the Audit provided by CIE in the Diploma Guide materials. Use this information, together with the needs and objectives of your institution, to guide your plan.

If you are a ◇ Centre, your learners are going to be the kind(s) of teachers and/or trainers that you are planning to attract. Your Centre may be planning to cater for a specific niche e.g. primary or secondary school teachers. Always make sure you have done your research properly into the characteristics of the kind of group(s) you are going to reach out to. Your candidates are likely to have much greater opportunities for using ICT within a teaching and learning context but don't work on assumptions, find out the realities. Use this information, together with the needs and objectives of your institution, to guide your plan.

NB you should identify needs in a systematic and thorough manner not only at the design stage, but also at the start and during the programme itself. You will need to get to know your learners (better), identify their backgrounds and their learning needs.

- To help you with this we have included on page 28 a *candidate information form* which you might like to use with your Diploma candidates as they enrol on the programme. It may be used with or without an initial talk/chat/interview. You can modify or rephrase the form as suits your local needs and preferences.

Cambridge International Diploma in Teaching with ICT

CANDIDATE INFORMATION FORM

Your full name:
Mailing address:
Tel:
E-mail:
Your current employer:
Mailing address
Your professional qualifications
Your experience of using ICT within a teaching and learning context

Your ability to use a range of ICT resources?	
☐ Different types of computer	☐ Generic 'office type' software
☐ Digital camera and video	☐ Subject specific software
☐ Scanners and other peripherals	☐ Video conferencing
☐ Internet	☐ Pod-casting, Web-blogs etc

Your future plans to embrace ICT in teaching, learning and own CPD

- It is quite normal for any Diploma Centre to have candidates from a wide range of educational and professional backgrounds. In addition to the personal details which will appear on your candidate information you should ask your candidates about:

  o their current role and responsibilities
  o the nature of the institution in which they work
  o their learners' age, phase of education, background(s).

- At the earliest stage possible you should check three essentials before the candidate proceeds. The candidates

  o must be currently teaching
  o must be able to submit assignments which are authentic and practice-based
  o should be informed that they have up to 3 years from the submission of their first assignment to complete the three modules of the Diploma.

- There are many reasons why practising teachers might choose to undertake the Diploma in Teaching with ICT. For example, to

  o enhance and update their own professional ICT teaching and/or training skills
  o enrich and expand their own professional understanding and knowledge
  o experiment with new and innovative teaching and learning techniques
  o test themselves against global performance standards
  o take new opportunities to enhance new technology in order to transform teaching and learning
  o expand their own professional development and career horizons.

- The candidates will use your Centre as a source of information, guidance and motivation.

2.   Manage the Use of ICT in Teaching and Learning

For **Δ** Centres your candidates may find it difficult to deliver activities that involve the use of ICT to different types of learners within the one institution and with sufficient variety. It may be advisable to establish links with other learning institutions beforehand so that your colleagues will be able to put their planning into practice if this can not be achieved 'in-house'. Be prepared to offer support to your colleagues by observing training sessions. As a Programme Leader it is vital that you are able to give sufficient guidance and support to candidates so that planning can be developed sufficiently through to the management and evaluation phases. Availability of Centre resources will play a vital role in the success of the programme.

For ◇ Centres your candidates are likely to be in an excellent position to manage their planned use of ICT and it may be that a wide variety of teaching and learning contexts are explored. Again, as a Programme Leader it is advisable to familiarise yourself with the different learning environments that your candidates are likely to expose themselves to so that you can be in a stronger position to understand and assess their capabilities.

3. Evaluate the Effectiveness of ICT in Teaching and Learning

For **Δ** Centres your candidate's evaluations are likely to be limited by the teaching and learning opportunities, resources and institutional development of the Centre unless a wider range of learning contexts have been planned for. It may be helpful to direct candidates to looking at published research so that they may compare their own planning and management with that of others in different institutions. Such prior investigations could also prove useful in helping candidates from **Δ** Centres to determine their own research paths.

For **◇** Centres your candidates are likely to relate the findings of their own research to their own professional practice and institutional development more easily provided the design of your Diploma programme has helped candidates to identify these at an early stage.

For both types of Centre, it could be helpful to provide additional prior support to candidates in how to carry out educational research in the use of ICT in teaching and learning. Remember that you will be working with a range of teachers, both in age and competence and for many, skills in carrying out effective research may have long since been forgotten!

A common weakness of some teachers is their inability to critically analyse their own personal skills, knowledge and understanding in the use of ICT through a self-audit. This is particularly relevant if those teachers are coming from a limited ICT background. In addition, some teachers experience difficulty in being able to produce a personal action plan. Consideration and awareness of these issues through good design of the Diploma in Teaching with ICT will enable your candidates to make effective progress with this module.

Content and methods

There are two watchwords when planning content and methods for your programme – *balance* and *variety.*

Balance

Bearing in mind the varied learning needs of your candidates, make sure you achieve an appropriate balance - between

- different training approaches e.g. group workshops, one-to-one tutorials, self-study
- professional development activities and teaching practice
- elements in your programme, e.g. principles and practice of differentiation.

Variety

Make the most appropriate use of the range of techniques available.

For example, you can consider using:

- Presentations and follow-up exercises
- Visiting speakers and/or video conferencing
- Video Resources, Internet research, Pod-casts and Web-blogs
- 'Expert' panel Q&A
- Visit to a local schools

- Seminars
- Use of ICT teaching and learning websites (e.g. some of those recommended in the CIE Guide such as Becta)
- Visit to another Centre
- Group and/or pair work (see section 3 for more details)

It may be that as a **Δ** Centre or a ◇ Centre your resources are such that you may wish to consider delivering the Diploma in teaching with ICT as a group project rather than to individuals. This is possible and a possible model is provided at the end of Section 2.

The essential point is that the way you design and manage the Diploma in Teaching with ICT programme should fit with the needs, knowledge and skills and experience of your candidates.

For example, we know that individual learners have different preferred learning styles. So you should design your Diploma programme with this in mind. Teachers following the Diploma programme are themselves LEARNERS!

Variety does not mean complexity. Rather than planning for each session in the programme to include as many types of trainer- learner interaction as possible in the time available, consider carefully the learning objective(s) for each session, and with this focus select the most appropriate activities that will enable your candidates to relate to their own teaching and learning expectations. Keep it simple! Over the programme as a whole you will achieve a rich blend of activities, with sessions which are themselves coherent and form a sequence with a clear continuing thread.

ICT Resources

Concerning ICT resources, the watchwords are *range* and *appropriateness*.

- *range*

  Given the number of candidates, has your Centre got a sufficient range of ICT resources to support the programme? A 'range of ICT resources' can and should be more than a computer and an office type software suite. All kinds of ICT can support teaching and learning - digital cameras, digital video, scanners, PDAs with global navigation, tablet PCs, projectors, chromo screen video technology, thinking skills software, animated software to support different curricular areas, music technology, interactive whiteboards, video conferencing, pod-casting, web-blogs and use of mobile phones? It is very much the aim of the Diploma to open up these wider horizons and to give teachers the opportunity to explore and experiment. You don't have to provide all of the above list, but you should as far as possible use the Diploma as an opportunity to develop the scope of 'ICT' within your Centre.

- *appropriateness*

  Given the way you are deciding to approach the Diploma, are your resources appropriate to a teaching and learning context? For example, if you are planning to introduce innovative, cutting edge technology to your candidates, will they be able to recreate its use within the classroom in order to evaluate its impact?

- Resources include providing a library of relevant ICT related books, magazines, journals and news cuttings and arranging access to electronic resources (e.g. on CD-ROM and the Internet). Clearly the resources need to meet your candidates' needs. But they also need to be accessible.

- You also need to decide how to give equitable access to resources to all of your candidates, particularly if an innovative resource is in short supply but is deemed to be something that is likely to be a popular research object. Don't forget that many of your candidates could be totally unfamiliar with such a leading-edge resource and this could have a negative impact upon their planning, managing and evaluation of ICT in teaching and learning if they themselves have to master resources within a short time frame.

- You are in charge. You are responsible for selecting, organizing and setting out the resources. They need to correspond to the learning needs of your candidates, the learning objectives of your programme and the time that you have allowed.

- Although the best resources are those which encourage your candidates to go further – these have to be carefully balanced against their own knowledge, skills and competence.

Assessment of the Programme

Consider the following points:

- While the Diploma assignments form the summative assessment of achievement on the programme, you should consider the kinds of formative assessment which are going to help your candidates' progress. These formative assessments will also guide you during the programme in preparing the next stage in the programme, in order to meet specific needs which are emerging and to enable your candidates to develop.

- Remember you are dealing with adults who are themselves teachers so be sensitive in your approach.

- In the Diploma we recommend that you consider a range of possible methods of assessment, and their advantages and disadvantages. Do the same as you design your Diploma in Teaching with ICT programme.

- It is important to be sure that your candidates have properly understood the assessment criteria and demonstrated appropriate skills, knowledge and understanding relative to their assignments but this does not mean setting formal tests of knowledge. For example you could set up a discussion group where candidates could reflect and talk about their experiences of ICT in the classroom and how their own institutional visions either support or create a barrier to teaching and learning.

- The Diploma in Teaching with ICT is practice-based. The way you assess is in itself a demonstration to your candidates of the way they can assess. In other words your Diploma programme should open their minds to the range of assessment approaches which are possible, and should encourage them when possible and appropriate to try new and different approaches that take advantage of new technologies, and to learn from these experiences.

- In your approach to formative assessment of your Diploma candidates, try also to include some 'warm up' preparation for the requirements of the Diploma assignments themselves. For example, when considering a range of ICT resources that can be used in the planning of teaching with ICT, try an exercise such as the following Task.

Example Task

Access as many education supplier catalogues as you can. Some focus specifically upon ICT, others give passing reference. A suitable starting point would be to examine on-line catalogues such as:

http://www.taglearning.com/index.php
http://www.granada-learning.com/
http://www.logo.com/
http://www.sherston.com
http://www.widgit.com/
http://www.playdigitalblue.com/home

Carry out some research into the types of hardware and software that are available for a particular curriculum area that you are interested in. For each resource that you have recorded, try to identify possible opportunities for using these in the classroom. Also record whether the resource lends itself to individual or small group work. You may also wish to make a note of the cost so that you can reflect upon whether this is likely to create financial considerations for your department or institution in the future.

- Similarly ask your candidates to practise writing brief reflective reports using the same themes as given in the assignment guidelines – e.g. to write a brief report on how supportive their institution is in supporting and developing the use of ICT in teaching and learning through finances, resources, CPD and leadership support. You can then ensure that your candidates become confident and comfortable in using their own voice to analyse their own experience.

Complete the programme plan

When you have drafted your Programme Plan, look at it critically. Think about these questions:

- Does your plan give opportunities for delivering the programme in a number of ways?
- Does your plan make sufficient use of available ICT resources?
- Does your plan reflect the needs, skills and knowledge base of your candidates?
- Are there sufficient opportunities for active learning?
- Are there sufficient opportunities for learning from experience?
- Is the balance and range of the programme appropriate to the needs of your candidates and Centre?
- Does your plan present any barriers to candidates in being able to make progress at their own rate?
- Does your plan take into consideration a range of institutions and learners?
- Is your plan firmly focused upon the use of ICT in a teaching and learning context?
- Does your plan allow for candidate evidence to be presented n a number of ways?
- Does your plan have sufficient formative assessment points built into it?

The programme plan should focus on regular sessions. However, to ensure continuity and an appropriate pace of preparation, you must consider what candidates should do between training sessions, as in the diagram below:
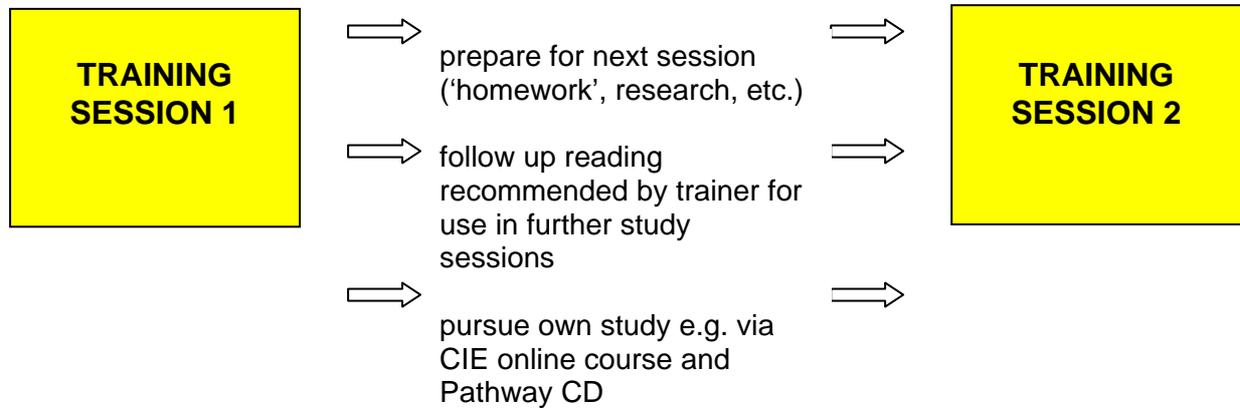
The key to the Diploma in teaching with ICT programme is the way in which you organise:

- training sessions, e.g. workshops, discussions, tutorials, groupwork
- personal study, e.g. research, reading, reflection
- practice, e.g. candidates working with learners in a teaching and learning context within their own institutions (or others)

so that the programme as a whole and the elements within it correspond to the planning, managing, evaluating and reflective activities that underpins the Diploma.

Here is one example of how a Centre could customise the delivery of the Diploma so that a group of candidates may investigate the same context. Please note however that in adopting this approach, Centres should be mindful of the fact that some candidates are beginning to produce the same repetitive work therefore it is essential that reports are individualised as much as possible.

POSSIBILITIES FOR A WHOLE TEAM APPROACH TO THE DIPLOMA

Approach

This Centre – a ◇ Centre - decided that an alternative way of completing the Diploma would be to introduce a team project approach that integrates collaborative professional development experience (a study group) with individual assignment preparation by teachers.

A number of projects could be investigated via a team approach. There were a minimum of three and a maximum of four members to each team. The same or different teams could be used for each project. Teachers could be within the same faculty / department / subject area. Alternatively, teams consisting of teachers in the same institution but working across the curriculum, or teachers from different institutions with shared interests would be encouraged.

Throughout the Diploma programme, the groups ensured that they planned, managed and evaluated sufficient learning sessions to enable individuals to gain the experience and evidence they needed, e.g. of the range of learning contexts. Thus one learning session focused upon a whole class or curriculum context while the other concentrated upon individual learners. The teams also made sure that for **each** learning session, **different** types of ICT resources were used.

NB the team approach structure retains the cycle of planning, management and evaluation but also offers collaborative project opportunities within each learning session.

In order to provide sufficient opportunity for individual members to learn from and gain evidence from the projects for their assignments, the team had to clearly identify a project title and context together with the individual responsibilities of each team member.

The structured steps within Part A of the three Diploma module assignments provide a clear framework with which to scaffold the project work of the team, e.g. identifying the opportunities in using ICT to support individual or whole group learning. The individual members can develop their own insights and learn from each other.

It is essential in this approach that whatever projects are chosen by the teams, **every** member of the team has a clear understanding of their individual roles and responsibilities in ensuring that **all** of the CIE structured activities are fully covered.

Possible ideas/projects that could form the basis for teachers' projects

1. An interactive multi-media resource for use by a whole class or curriculum area to support learning.

2. A web site to promote individual access to school information (prospectus, classes, teachers, curriculum, extra curricular activities etc.) by pupils, parents and the wider community.

3. An interactive study support resource that would assist learners in preparation for external examinations by offering guidelines, past examination questions, short multi-choice on-line testing etc. for an identified curriculum area.

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4. An on-line ICT resource user guide for a digital camera, video or electronic whiteboard that uses multi-media capabilities of the device as part of the presentation by learners to other users.

5. A managed learning environment that offers learners the opportunity to download resources, upload assignments, e-mail teachers for curriculum support and gain access to useful hyperlinks in order to further develop self-study.

6. An interactive foreign language resource that will provide audio and visual translations for learners within a particular curriculum area or self-study professional development programme.

7. A video conferencing teaching module for use with whole groups to include interactive programs linked to a pc that can be shared by participants so as to facilitate collaborative group work across different institutions or curriculum areas.

8. A desk top publishing application that will allow a whole group or individuals to produce a professional document that could be used to promote a department or institution with the help of funding via sponsorship from the local community or businesses.

9. A detailed and informative presentation produced by a whole class on behalf of the local community to promote aspects of culture, the arts and history of the locality in which the institution is based. The presentation should include as many areas of multi-media production that are available to the learners.

10. Production of a set of computer controlled devices or models (in-house or commercial such as 'Lego') that demonstrate an understanding of sensors, feedback and data-logging then produce graphical representations of activities over time so that results can be analysed and interpreted by individuals or whole classes.

11. Production of a short animated film by individual learners or small groups using stop/start digital video recording to promote a key educational issue such as 'citizenship', 'drug cultures' or 'teenage pregnancies' etc.

12. A digital radio show that can be broadcast around the institution from a central area that allows learners to participate in real-time computer based learning activities that will promote working across different ages/years but with a competitive edge.

All of the above examples should provide sufficient opportunities for team members to identify particular strengths and areas of expertise.

Examples of evidence

A typical team has considered example 1 from the above and the learning session is concerned with whole group teaching.

The nature of this example will allow individual team members to identify typical strengths and interests. As this is a multi-media resource, the final product draws upon skills such as word processing, DTP, digital video, digital audio, use of the Internet for research purposes, databases and spreadsheets to name but a few. Each team member selected and agreed with their colleagues, areas of responsibility for the planning, management and evaluation of the learning session.

The first document needed to be produced was an overview of the project together with roles and responsibilities. In deciding the roles and responsibilities, the team would needed to carefully consider the structured activities required by CIE.

Here is part of an individual team member's assignment (from Part A of Assignment 1) drawing on experiences within the project group work.

Step 3   Evaluating ICT resources for use by teacher and/or learners

ICT RESOURCE 1

(Word limit : 200-400 words)

ICT resource evaluated

We decided to use the Internet for research and a multi-media authoring application called Mediator to produce an interactive CD along with a CD re-writer.

Way(s) this resource could support teaching and learning

The resource can be put onto the school intranet and be made accessible from any classroom by any class. The teacher can use this resource effectively as a teaching aid to the whole class when it is projected onto a whiteboard. The resource also narrows down whole class activity so that the learning is more clearly focused on the curriculum area.

Suitability from your perspective and from your learners' perspective

The Mediator program was very simple as it relied upon drag and drop icons in order to quickly put together a multi-media page. These too could be very quickly linked together so within a short space of time, we had produced several 'pages' of resources. Once burnt onto the CD, the learners found the resource very easy to navigate. The resource held together all of the important documents, sounds and picture that the pupils would require for their project work without having to spend hours using the Internet.

Way(s) in which you and/or your learners could use this resource

The learners could refer to the resource at any time by accessing it through the school intranet. In addition, copies of the CD could be made available to assist individual learners if requested.

Your experience of trialling the resource

> The Mediator program was very easy to use and as a result, the manual was hardly referred to by the team.

Issue(s) identified in your trial use

> The CD re-writer however caused more problems as we found that we were using the wrong type of recording media (CDRW discs could not be read in standard CD drives so we had to change these).

Issue(s) related to managing the learning environment in using this resource

> When the Internet has 'gone down'.

Explain how you would deal with these management issues

> There appears to be real benefit in producing resources such as these for whole class use. A real benefit has certainly been when the Internet has 'gone down' – the resource has allowed learners to continue with their project work – in fact, most learners prefer this resource as it is saving wasted time looking elsewhere for important documents and pictures.

Your recommendation on whether or not this ICT resource should be used

> Without doubt the resource should be used.

Your justification for recommendation

> The teacher can use the same material as an introduction to the lesson whilst the learners can relate more closely to the activities they are being asked to completed for their studies.

This is an extract from the same candidate's **Reflective Report (Part B)**

The team has discovered from holding discussions with different HODs that suitable learning resources are in short supply to different curriculum areas. Many of the syllabus' used by departments require learner access to specialist learning resources, particularly when it comes to the production of coursework. It would appear that due to the success of our History interactive resource, more departments are now looking towards the production of this kind of resource and this in turn has brought about implications for our institution. There is now a major question about who should be producing such materials, where the time can be found to do this and whether a technical author should be employed for the period of 12 months to work closely with each department thus freeing teaching time. From the learner's point of view, there now appears to be an expectancy amongst some students that this type of resource is made available to every department, particularly from the home-based, self-study aspect. There is a danger however that by narrowing down access to resources, too many projects will begin to look identical and this is another major implication that the institution will have to monitor and consider more closely over time.

This has been the first time that our team has worked together and despite some of the earlier setbacks, we feel that we could now offer a solution to other teams who would like to produce similar resources. On reflection, we have decided that Mediator is rather limited in what it can offer and for future projects, we would recommend the use of 'Authorware' or 'Hyperstudio' but we realise that we would all need to improve our skills further with these more enhanced applications. However, the end result would certainly justify the added investment in terms of time and energy. We also feel that although we spent a long time on planning for the learning session, this was still not as effective as it could have been. Halfway through the project we discovered that one of the team members had a particular skill that was vital to the success of the project. Had the team not been 'lucky' then we would have failed – more careful planning would have brought this to our attention.

The question of whole group teaching and learning is very interesting and this project has given the team the opportunity to research a number of questions as to how useful ICT is in supporting this method. What has made a significant impact upon whole class teaching …..

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SECTION 3

Programme plans
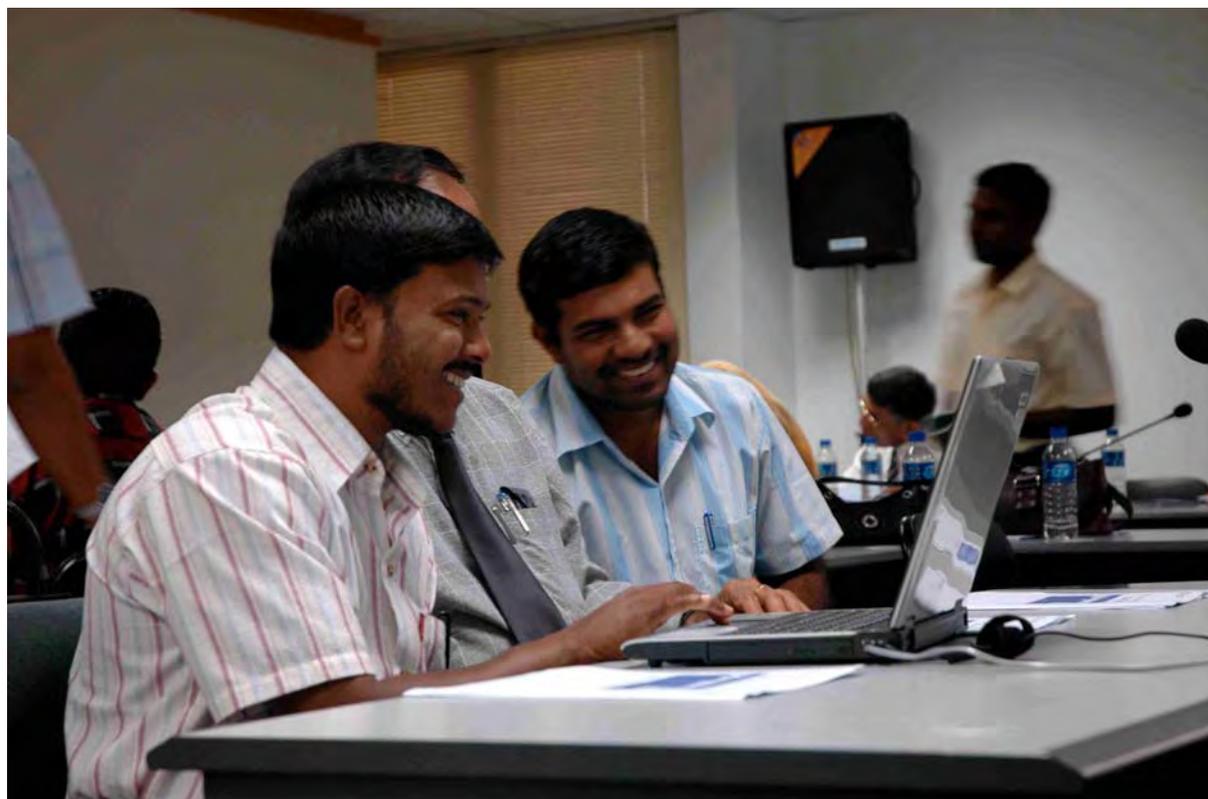
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Using the programme plans

- Our programme plans are set out module by module for easy reference.

- On the left hand page is the **standard programme** which can be used by **Δ Centres**. On the right hand page are enhancements which ◇ **Centres** will need to consider.

  (NB however that Δ Centres might feel able to borrow from ◇ ideas and there is no problem with ◇ Centres simply offering the standard programme.)

- In each plan, you will find content (topics/themes) in the left-hand column, and activities and timing in the right-hand (shaded) column. Activities and timing can be varied to suit trainer skills and preferences and learner needs.

- Useful additions to and imaginative variations of the programme are more than welcome but please note that they must be:
  o appropriate to the learner's (candidates') needs
  o relevant to the Diploma in Teaching with ICT syllabus
  o accessible to as many Diploma candidates as possible.

- It is difficult to be specific about timings/durations as local demands and conditions vary considerably. Regular training, however, helps motivation and concentration. Professional training also benefits from momentum, shared learning and, most of all, enthusiasm. These can all be lost if the programme is too lengthy.

- The balance and sequencing of training events and other contact between the Diploma team (trainers, mentors) and candidates, and the individual study and reflective practice and assignment preparation by the candidate is a crucial factor to consider in your programme design.

- Back-up plans are essential. What happens if a trainer is ill, the Centre is put out of action or a transport system fails?

- Certain abbreviations are used in the programme plans. These are:

PL	Programme Leader	**Q&A**	Question and Answer
HOD	Head of Department	**T/L**	Teachers and Learners
WGT	Whole Group Teaching	**IL**	Individual Learning
CPD	Continuing Professional Development	**RP**	Reflective Report
T&L	Teaching and Learning	**ICT**	Information and Communications Technology

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Δ Centres

Module 1 : PLAN TO USE ICT TO SUPPORT TEACHING AND LEARNING

1. Introduction to all three modules	Introductory talk	1 hour
Overview of the Diploma		
Interrelated Objectives	Plan, manage, evaluate cycle awareness	
Method of Assessment		
Candidate suitability and experience	Completion of a candidate self-audit	
Range of ICT resources	Completion of a candidate self-audit	

2. Using ICT to investigate a T&L issue	Workshop	2 hours
Relevant ICT issues in teaching and learning	Activity – use the Internet to investigate ICT	
Producing evaluative reports	possibilities in teaching and learning	

3. Identifying opportunities for using ICT	Workshop	2 hours
Options for using ICT in relation to learners	Produce a list of suitable learning sessions	
What is appropriate use of ICT in T&L?	where ICT could be used in different ways to support	
Benefits to be gained from using ICT	groups and individuals	
Why justify the use of ICT in T&L?	Produce a comparison table of the benefits of using	
A consideration of the non use of ICT in T&L	ICT in identified T&L contexts	

4. Evaluating ICT resources for use by T/L	Workshop	2 hours
How can ICT resources support T&L effectively?	Video evidence and analysis T&L activities that use	
Evaluating ICT resources for use by T/L	ICT (UK materials would be very helpful here)	
Can ICT resources be used in many different ways?	A consideration of pedagogy – using ICT when it is	
What really happens in a T&L session using ICT?	appropriate to the learning situation	
Identifying issues in managing learning environments		
Providing feedback – making recommendations		

5. Developing strategies for using ICT in T&L	Workshop	2 hours
Identifying learning aims and objectives	How to produce an effective lesson plan that	
Identifying teaching and learning activities	considers differentiation, outcomes and opportunities	
Identifying expected outcomes for learners	for developing skills	
Identifying opportunities for developing learners skills		
Identifying opportunities for developing non ICT skills		
Managing the use of ICT effectively		
Assessing learners' work and monitoring progress	Using ICT in formative assessment methods	

6. Reflective Practice	Workshop	2 hours
Institutional development	Review of interrelated objectives relative to	
Improving own professional practice	candidate's own findings	
Improving learners' capabilities	Discussion groups, use of video conferencing	

◇ Centres

Module 1 : PLAN TO USE ICT TO SUPPORT TEACHING AND LEARNING

◇ **Centres** can enhance the standard programme by adding more specialist sessions.

For example:

A. Preparing for the use of ICT in T&L	Lecture and Discussion	1 to 2 hours
The contribution of ICT to T&L	Visiting curriculum advisers / teachers	
ICT as a transformational tool	Teacher Training organisations	
Critical analysis of own knowledge and skills	Shared reflection of previous T&L experiences	

B. Evaluating resources for use by T/Ls	Workshop	3 hours
Hardware devices that can support T&L	Internet research	
Software that can support T&L	Internet research	
New technologies – video conferencing, podcasts etc	Internet research	

C. An analysis of different T&L organisations	Research and Visits	2 hours
Primary, secondary and FE settings	Arranged visits to local institutions	
Educational visions and ICT development plans	Visiting speakers, education officials	
Using ICT in UK schools	Internet research	

◇ Centres can group sessions together to form day or longer residential programmes.

For example each of the following would make a good day's programme:

- sessions 1 + 2 + 3 + A + C

- sessions 4 + 5 + B

Try these exercises

A.   Here are some useful tips that will help you to begin planning the use of ICT in a primary classroom setting:

- Use ICT as often as possible - in as many subjects as you can.

- Use short, sharp tasks - it takes a long time to get around the class, short tasks mean more regular access.

- Establish routines - develop learner habits and build their confidence over time, let pupils take responsibility.

- Become confident with a small number of quality software titles - don't attempt to use too much software, use what you know well. Plan: at medium and short term levels. Make it clear what learners will be doing and what ICT capability will be learned.

- Link ICT to other classroom work wherever possible - Plan when to use the computer and when *not* to use the computer.

- Teach pupils to use ICT - Interact positively with pupils at the computer (not just when problems occur).

- Use checklists for pupil usage - Keep a record of which pupils have done which tasks (this is important evidence).

- Keep a portfolio of pupil's work - Keep examples of what pupils have produced in relation to tasks.

- Raise the profile - establish an ICT corner in the classroom - label the computer, use display to promote the program being used and the task to be done, demonstrate examples of work completed.

Reflect upon these tips and record how you might include some of these in your ICT planning relative to an identified year group and curriculum area. Identify tips that you know you can address on the strength of your existing knowledge and experience. Now identify the support you would need in order to address the other areas!

B. Identify one software resource that attracts you and could be used mainly by learners. Despite your enthusiasm, it is possible that there are obstacles elsewhere in your institution or department that are preventing you being able to move forward with fresh ICT ideas. Consider the following questions and record your reflections on the following grid.

Question	Yes / No	Reasons
Are you aware of the potential that this software has in enabling creativity, collaboration, flexibility and a greater understanding in the learning and teaching environment?		
Is there a clear link between the purchase of this software and learning benefits for learners?		
Are other colleagues aware of how this specific software could be used in school?		
Are staff development needs considered when purchasing software?		
Do you need to evaluate the current software available within the school to support learning and teaching before you consider any new purchases?		
Do subject leaders or teams take a lead in evaluating possible ICT software rather than yourself?		

Δ Centres

Module 2 : MANAGE THE USE OF ICT TO SUPPORT TEACHING AND LEARNING

1. Introduction to Module 2	Introductory talk	1 hour
What is meant by whole group teaching? What is meant by individual learning	Task – matching different types of ICT to different T&L contexts, their relevance and impact	

2. Managing the use of ICT in supporting WGT	Workshop	3 hours
Learning environment awareness, room designs Preparing materials for T/L use Using ICT to deliver a learning session Describing ICT resources and recognising skills The impact ICT can make upon organisations	Using 'Paint' programs and digital cameras Creating ICT based resources Using interactive whiteboards effectively Writing hardware and software evaluations for others Visiting speakers and Internet research	

3. Managing the use of ICT in supporting IL	Workshop	2 hours
Learning environment awareness, room designs Integrating ICT use with non ICT use in T&L Developing learners' skills in using ICT Identifying ICT skills of the learner and teacher Intervention to support learners' progress The contribution ICT can make to learning objectives Using ICT to encourage additional skills The integration of other skills in learning environment The impact ICT can make upon management Does non use of ICT encourage other outcomes?	Using 'Paint' programs and digital cameras Compare the results of two similar lessons - one that uses ICT and the other that does not. Has the use of ICT really made a difference and if so, in what way? Produce comparison tables. Investigation – does the use of ICT motivate all learners and enable learning objectives to be reached more quickly? Visiting speakers, vice principals etc Video analysis. Discussions with learners	

4. Reflective Practice	Workshop	2 hours
Institutional development Improving own professional practice Improving learners' capabilities	Review of interrelated objectives relative to candidate's own findings Discussion groups, use of video conferencing	

◇ **Centres**

Module 2 : MANAGE THE USE OF ICT TO SUPPORT TEACHING AND LEARNING

◇ **Centres** can enhance the standard programme by adding more specialist sessions.

For example:

A. Making key decisions	Discussion and Research	2 hours
Does curriculum planning incorporate ICT?	Analysis of lesson plans, schemes of work	
Who should take a lead on ICT purchasing?	Research – what is a typical cost of ICT per learner?	
Do institutions use ICT to promote a variety of T&L?	Visits subject leaders, HODs, vice principals	

B. Working with individual learners and groups	Workshop	2 hours
Planning resources with groups of learners	Devising project work with digital cameras / video	
Planning resources with individuals	Skill training requirements for identified software	
Are there real advantages to working in groups?	Learning outcomes – an analysis of standards	

C. Management Issues	Workshop	2 hours
Producing interactive lessons	Server based resources linked to whiteboards	
How can ICT best support learning environments?	Designing and justifying room layouts	
Health and Safety Considerations	Research into organisational risk policies	

◇ Centres can group sessions together to form day programmes. Combinations can be varied to suit local needs but

- sessions 1 + 4 + A   would be a practical 'hands on' day

- sessions 2 + 3 + B or c   would be a day focusing on underlying pedagogy

Try these exercises

A. Consider the following key questions relative to your own institution.

- Have you reviewed curriculum planning to incorporate ICT effectively?

- Do subject leaders and teams take a lead in identifying opportunities for ICT to make an effective contribution to the delivery of schemes of work? How could your school facilitate the development of such an action?

- Does your school have a curriculum map that supports the integration and contextualisation of discrete ICT teaching into curriculum subjects? Does this curriculum map provide opportunities for learners to apply their ICT capability?

- Does your school have the resources to allow ICT to be integrated into the curriculum?

- As a subject leader or teacher, are you aware of the different ways that ICT can support learning across the curriculum, including:

    - applying ICT capability in a subject context;

    - providing subject-based software to develop knowledge, skills and understanding;

    - providing specific and generic ICT hardware/peripheral resources to support subject learning;

    - providing resources to support personalised learning – for example, the use of integrated learning systems?

    Carry out some internal research by talking to your senior colleagues and management teams. Try to find out what happens in other institutions in your area.

B.   Do the learning environments that you have planned for meet your vision for learning and teaching? For example, have you carried out an audit of the ICT learning environments that are currently available in your school?

Are all of these environments:

- age appropriate?

- supporting learning and teaching styles being used?

- supporting specific curriculum use of ICT?

- providing comfortable, safe learning environments for learners?

Are there new ICT developments that you could consider in order to support further improvements in learning and teaching?

Who quality assures installations and maintenance of ICT resources?

What level of technical support does the school have in place? Does this support enable teachers to focus on learning and teaching?

Have you considered the place of interactive presentational technologies and digital projection?

Have you considered the benefits of resources that provide mobile learning environments?

Consider each of these questions and record your answers.

Δ Centres

Module 3 : EVALUATE THE EFFECTIVENESS OF ICT IN TEACHING AND LEARNING

1. Introduction to Module 3	Workshop and discussion	2 hours
Educational research – some dos and don'ts Designing a personal audit Producing an effective personal action plan	Internet research into ICT in learning environments Use of commercial ICT audit tools In-house template covering key areas	

2. Evaluate the effectiveness of ICT in WGT	Workshop and discussion	2 hours
Evaluating the impact of ICT on learning outcomes Making comparisons between use/non use of ICT Identifying benefits to T/L of the use of ICT Identifying potential disadvantages in using ICT Identifying improvements based on experience	Use data analysis tools to measure impact of ICT on learner performance Examine new leading-edge technologies Use of discussion groups, news groups and professional organisations	

3. Evaluate the effectiveness of ICT in IL	Workshop and discussion	2 hours
Applying assessment criteria to learners The impact of ICT upon individual progress The impact of ICT upon learning activities Identifying improvements based on experience	Use data analysis tools to measure impact of ICT on learner performance Use of discussion groups, news groups and professional organisations	

4. Evaluate the effectiveness of ICT in T&L	Workshop	2 hours
Candidate research into an educational ICT issue Making effective comparisons to form arguments Relating findings to own practice & future planning Relate research findings to institutional development	Analyse through research the impact of ICT on teaching, learning and institutional development - Develop critical thinking of when and when not to use ICT	

5. Use ICT as a tool to enable CPD	Workshop	2 hours
The use of self-assessment tools to audit skills Identifying targets for CPD Producing a detailed action plan	Carry out self audit of ICT skills and experience Devise personal CPD targets – make them SMART! Writing effective action plans	

6. Reflective Practice	Workshop	2 hours
Institutional development Improving own professional practice Improving learners' capabilities	Review of interrelated objectives relative to candidate's own findings Discussion groups, use of video conferencing	

◇ Centres

Module 3 : EVALUATE THE EFFECTIVENESS OF ICT IN TEACHING AND LEARNING

◇ **Centres** can enhance the standard programme by adding more specialist sessions.

For example:

A. Moving all staff forward in an institution	Workshop	2 hours
Applying and developing ICT capability	Identifying institutional barriers exercise	
Institutional development plans	Analysis of own institutional development plans	

B. Planning for the improved use of ICT	Workshop	2 hours
Promoting dialogue within an institution	Discussion groups – the role of subject leaders	
Identifying key ICT initiatives	Discussion groups – taking risks – are they worth it?	
Institutional review and progress	Analysis of action plans against targets, inspections	

C. Becoming a reflective practitioner	Workshop and discussion	2 hours
Identifying strength and weaknesses	Group work with peers	
Identifying targets and personal action plans	Staff performance appraisals	
Relating research to own experiences	Internet research, pedagogy and self reflection	

◇ Centres can group sessions together to form day programmes. Combinations can be varied to suit local needs but

- sessions 4 + A + B   would form a valuable 'ICT planning' day

- sessions 5 + 6 + C   would focus on reflective practice and CPD

Try these exercises

A. Here are some suggestions that could promote an institution as making effective use of ICT:

- All staff work towards ensuring that learners are confident and capable users of ICT.
- Staff have considered the place of ICT capability in facilitating a learner's ability to work independently within and across subjects.
- A key person monitors ICT capability across the institution.
- Capability levels are supportive of the institution's wish that learners should use ICT as a tool to support their learning.
- All barriers have been identified that prevent learners using ICT as a tool.
- All staff produce cohesive plans that reflect the development of ICT skills, knowledge, understanding and opportunities for application.
- An ICT capability map of expectations exists that staff can use to plan and develop appropriate curriculum-based activities.
- All staff are aware of the need to develop learner's ICT capability across the range of ICT resources that they may need to engage with.

Paste the above suggestions into a table then try to add a further five of your own that are relative to your own institution. For each suggestion, indicate whether this quality exists together with what proof there is to support your judgements. For each quality that does not exist, identify the barriers that prevent this from happening together with what needs to change in order to make this a reality over the next twelve months.

B. Perhaps you feel that the current use of ICT in your institution is already providing added value in terms of supporting the raising of standards and providing enriched learning opportunities for learners.

Here are some key questions that you could carry out some research on:

- Does the use of ICT feature in your institution's current improvement plan and/or subject development plans?
- Do these plans reflect your vision or will they need adaptation?
- Are targets for the use of ICT to support teaching and learning included in your institution's plans?
- Is ICT embedded in current schemes of work or curriculum plans?
- To what extent do any of your subject leaders have an understanding of how ICT can enhance learning?
- Has time been set aside for the ICT subject leader to work with other subject leaders in order to assess areas where ICT can make a valuable contribution to the teaching and learning process?
- Who is responsible for managing changes in the use of ICT in your institution with regard to ICT developments and purchasing resources?
- Is there an ICT team that leads innovation in your institution and is this desirable?
- Do *you* have a model for promoting innovation?

C. Try to consider the wider aspect of using ICT in teaching and learning with regards to some of the latest technology. For example, are your colleagues aware of 'managed electronic community projects' or 'virtual learning environments' that they and their learners can be involved in without having the pressures of managing the elements of these services? Are your colleagues who may set problem solving tasks aware of relevant on-line scenarios that learners can access and that give feedback?

Investigate the following two websites and record your reflections. For each resource, try to identify the potential impact that this may have upon teaching and learning in your own institution.

www.bbc.co.uk/bitesize

www.samlearning.com

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Dear colleague

I hope you have found, and will continue to find this Planning booklet helpful.

Please let CIE know if there are questions which you still have about designing your Diploma programme. Also do let us know of any suggestions you may have for improving this Planning booklet.

Design is the first stage in the teaching cycle. Once you have started your Diploma programme, and are putting it into practice, I am sure you will have questions to ask of CIE and points to make to us! We are always happy to hear from our Diploma Centres, and will be looking for opportunities to enhance the Diploma.

We look forward to hearing from you.

Wishing you great success with your Diploma programme

Kind regards

Paul Beedle

Dr Paul Beedle
Manager, Professional Development Certification
CIE

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