

**Cambridge International Certificate
in Teaching with Digital Technologies
Syllabus code: 6224**

Cambridge
Professional
Development

**Cambridge International Diploma
in Teaching with Digital Technologies
Syllabus code: 6225**

For examination in 2017



CAMBRIDGE
International Examinations

Preface

This syllabus sets out the details of the Certificate and Diploma in Teaching with Digital Technologies. These are in the suite of Cambridge Professional Development Qualifications (PDQs) offered by Cambridge International Examinations.

For more information and updates about the PDQs, please go to www.cie.org.uk/pdq

The syllabus will help Centre Programme Leaders understand the design, structure and requirements of the qualifications. It will also help them guide their candidates accordingly. The syllabus focuses on the learning outcomes and related scheme of assessment. Please see the Cambridge resources for PDQ Centres for guidance on the design principles and features of programmes leading to the qualifications.

Why Cambridge?

Cambridge Professional Development Qualifications (PDQs) provide a strong framework to support the effective continuing professional development of teachers and leaders.

They help teachers and leaders to:

- engage critically with relevant concepts, principles, theories and international best practices
- apply new ideas and approaches in reflective practice in their own teaching and learning context
- evaluate experiences and outcomes to plan further development
- improve the quality of their teaching and leadership to enhance the quality of their learners' learning.

PDQs are designed to be integrated into schools' professional development planning, activities and culture. They help schools to improve, through cost-effective, sustainable programmes which benefit teachers and their learners. They demonstrate to parents, the school community and stakeholders that the school values and nurtures staff development.

Recognition

PDQs are also internationally recognised as a mark of excellence for the individual teacher or leader. In the UK, the Certificate is accredited with 60 credits at FHEQ* Level 4 and the Diploma is accredited with 60 credits at FHEQ Level 5. The qualifications help to improve teachers' and leaders' professional profiles and are valued for further professional and career development.

* FHEQ is the Quality Assurance Agency (QAA) Framework for Higher Education Qualifications in England, Wales and Northern Ireland.

Learn more at www.cie.org.uk/recognition

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1. Introduction to the syllabus

What is the purpose of the Certificate and Diploma in Teaching with Digital Technologies?

The Certificate and Diploma are designed to help teachers use digital technologies effectively and appropriately in supporting their learners' learning. The qualifications encourage teachers to reflect critically on their own and colleagues' teaching, and to experiment with new techniques and technologies. Ultimately, they will improve their own practice, so that all their learners learn more effectively.

Who are the qualifications for?

The Certificate and Diploma are for practising teachers. They are inclusive and relevant to all teaching and learning contexts: from primary and secondary general education, to adult and higher education. They help teachers to develop their:

- knowledge of the technologies available to them and their potential to support learning
- understanding of a range of theoretical concepts and models related to using such technologies in education
- skills in selecting and using these technologies in their teaching.

These are flexible qualifications, relevant to a wide variety of contexts: from situations where digital technologies are commonplace and easily accessible, to those where they are less so. Candidates may be at any stage in their teaching career. They may have already started using digital technologies in their teaching or be relatively new to them.

There are many different terms in use for 'teacher', 'learner', 'learning context' and 'learning session'. In this syllabus, we refer to '*teacher*', '*learner*', '*school*' and '*lesson*' as generic terms. For assessment purposes, we also use '*candidate*', where appropriate, to refer to the teacher preparing for the qualification.

What essential principles underpin the design of the qualifications?

Excellent teaching

Research indicates that excellent teaching is the most significant positive factor contributing to learners' development. The quality of a school or school system depends on the quality of its teachers and their teaching.

The characteristics of excellent teachers include:

- knowing their curriculum area well
- understanding their learners and meeting their needs as individuals
- encouraging learners to engage actively in their own learning
- making connections, for example to learners' experience, the real world, and wider contexts
- using a variety of teaching strategies and activities appropriately
- being reflective and creative practitioners engaged in continuous professional learning
- being collaborative and supporting colleagues, school and community.

The Certificate and Diploma in Teaching with Digital Technologies are designed to encourage and recognise these attributes. They focus on a reflective cycle of teaching and learning practice in which teachers:

- plan suitable learning experiences for learners
- implement and manage these experiences
- evaluate their effectiveness
- adapt their teaching to develop it and their learners' learning
- reflect on and share their professional learning with colleagues.

Excellent professional development

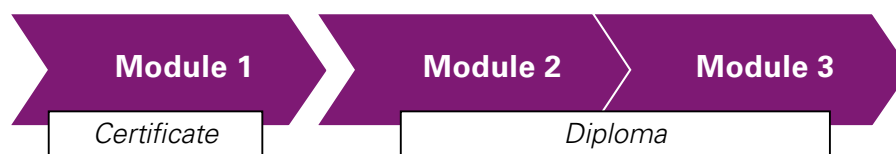
Research indicates that excellent teacher professional development:

- is integrated into the everyday life of the school and the teacher
- considers teachers' prior knowledge and experience
- offers opportunities for reflection and learning from experience
- encourages and supports innovation and collaboration
- helps teachers to develop, and critically engage with, their own theories of learning
- enriches teachers' learning through critical engagement with the theories of others
- is sustained over time and supported by people with expertise.

The Certificate and Diploma are designed to provide for such professional development. They involve a spiral of professional learning – each stage is a cycle of experiential learning and reflective practice following on from the previous cycle and leading on to the next. Areas of learning are revisited systematically within the programme so that the teacher can engage with these in more depth and detail, and acquire related knowledge and skills.

What is the qualification structure?

Module 1 can be taken on its own as the Certificate. Candidates can then progress to Modules 2 and 3 to complete the Diploma.



Candidates must achieve a grade of pass or distinction in a module before moving to the next module. The Diploma comprises all three modules.

	Module 1	Module 2	Module 3
Learning hours in preparation	120	120	120
Recommended programme duration	4 months	4 months	4 months
Assessment	<i>Portfolio of evidence of practice, learning and reflection</i>	<i>Portfolio of evidence of practice, learning and reflection</i>	<i>Portfolio of evidence of practice, learning and reflection</i>
Evidence length	<i>3600 words with work-based records</i>	<i>3600 words with work-based records</i>	<i>2400 words with work-based records</i>

What does a Certificate or Diploma programme involve?

A typical Certificate or Diploma programme run by a Cambridge Centre consists of a broad balance of activities, appropriate to the needs and circumstances of teachers and their school(s). The programme is planned by the Centre's Programme Leader and team as a coherent sequence of learning over time, with a variety of elements.

All programmes involve:

- guided learning – e.g. workshops, seminars and tutorials
- individual study and collaborative learning – e.g. reading, research and discussion
- work-based learning supported by the school – e.g. applying new ideas and approaches in practice, gaining feedback from colleagues.

Centres must provide at least 40 hours of guided learning for each module. Teachers should integrate as much preparation time as possible into their day-to-day practice. They should allow time for background reading and discussion with their colleagues, to enrich their reflective practice.

During each stage of their programme, teachers explore a number of key questions and engage in a series of activities closely related to their everyday professional work. These activities, and related reflections, produce evidence for assessment.

There is an important role for a mentor to play in supporting this learning. Through discussion and their questioning skills mentors encourage practising teachers to reflect on their learning and what it means for their approach to teaching. They also help practising teachers to demonstrate, through examples and accounts of practice, that they are:

- acquiring new skills
- learning how to use their skills and knowledge
- using them to maximum effect.

The mentor should not be the programme leader or another candidate on the programme.

How are the Certificate and Diploma assessed?

Assessment is through a portfolio of evidence, examined by Cambridge. In their portfolio, each teacher demonstrates their knowledge, skills and understanding in the context of their own work, from a variety of sources:

- classroom practice and observations
- materials that arise naturally out of the teaching process
- feedback from colleagues, learners and others
- the teacher's own reflections on their practice.

2. Cambridge International Certificate in Teaching with Digital Technologies

Introduction to the Certificate

Aims

In the Certificate, teachers will have the opportunity to:

- understand principles, concepts and issues concerning using digital technologies to support learning, and apply these in their own practice
- consider how and why digital technologies may be used to support their learners' learning and the challenges involved
- develop their ability to find and select appropriate digital technologies and related activities to support specific learning goals, and to engage and enthuse learners
- improve their ability to plan, execute and evaluate teaching episodes that use digital technologies
- develop their reflective practice skills to help them evaluate and develop their own practice in using digital technologies
- learn collaboratively, supported by their colleagues.

Structure

The Certificate comprises three units related to practice, and forms Module 1: Exploring teaching and learning with digital technologies of the Diploma in Teaching with Digital Technologies.

Unit 1	Understanding the potential of digital technologies to support learning and teaching
Unit 2	Teaching a lesson with digital technologies
Unit 3	Evaluating the use of digital technologies to support teaching and learning

Each unit is set out below in terms of its learning outcomes, key questions, assessment approach and evidence requirements, and assessment criteria.

- Each **learning outcome** specifies what a candidate is expected to know, understand and/or be able to demonstrate after completing the process of learning in the unit.
- The **key questions** in each unit show how professional learning can be focused.
- The **assessment approach and evidence requirements** explain how candidates can show that they have achieved the learning outcomes.
- The **assessment criteria** are used by Cambridge examiners in their judgements on the quality of the evidence presented. They specify what the candidate is expected to do to demonstrate that they have achieved a learning outcome.

Candidate requirements

Candidates need to:

- be a full- or part-time teacher, teaching in an educational institution such as a school, college, university or adult training centre
- teach in their current school context over a full academic year, for a minimum of 24 weeks and a minimum of six hours per week
- have the regular support of a mentor who understands the essential principles that underpin this qualification, and can provide helpful advice and observations
- teach a group with a minimum of six learners
- be responsible for planning and facilitating the learning activities of their learners.

Language Requirements

Candidates are required to have sufficient competence in English to participate in the qualification. All candidates should have English language competence comparable to Level B2 in the *Common European Framework of Reference for Languages* (CEFR).

We recommend a minimum requirement of 5.5 on the *International English Language Testing System*.

Further information may be obtained through the Council of Europe website:

[http://coe.int/t/dg4/education/elp-reg/cefr_grids EN.asp](http://coe.int/t/dg4/education/elp-reg/cefr_grids_EN.asp)

The IELTS website: **www.ielts.org/**

Evidence requirements

In the Certificate portfolio, candidates use the relevant Cambridge templates to gather, organise and present their evidence to satisfy the assessment criteria.

In the introduction to the portfolio, candidates confirm that they meet the candidate requirements and provide background information about their professional experience and role, and the context in which they teach. This is their opportunity to indicate significant influences on their work and professional development. This introduction is not assessed or judged, but helps the examiner to understand and interpret evidence and reflections.

The Certificate is designed so that candidates can demonstrate their professional thinking and practice as clearly and efficiently as possible. The evidence required matches the learning outcomes. In their portfolio, candidates provide evidence of their:

- *practice* – actual teaching practice
- *learning* – newly acquired knowledge, skills and understanding
- *reflection* – skills in analysing, synthesising and evaluating their experiences to develop their future professional practice.

With written evidence, candidates should keep to the word limits and respond to the prompts in templates succinctly. The prompts indicate how to focus and shape explanations, reflections and other evidence. Candidates must also follow Cambridge's rules for the format and size of digital evidence such as images.

Candidates' reflections should reference other people's thoughts and experiences, whether these are in the form of academic publications, or posts to online discussion forums or blogs. All sources must be clearly referenced.

Module 1 Exploring teaching and learning with digital technologies

Unit 1 Understanding the potential of digital technologies to support learning and teaching

Learning outcomes

Candidates will survey existing practice in their own and in colleagues' classrooms to develop a personal and local picture of using digital technologies in teaching. They will also survey the various technological tools available to them and to their learners. They will then start relating these to specific learning objectives, so they can:

- A identify the range of locally available digital technologies and how they are used to enhance existing, or allow new, learning activities
- B within their own school context, and looking at relevant theories, consider how and why these may be used to support specific learning objectives
- C within their own school context, identify digital technologies and related activities that allow their learners to, for example:
 - work collaboratively
 - find things out and construct knowledge
 - take responsibility for their own learning
 - solve real-world problems and make things happen
 - share information and communicate effectively with others
 - review, adapt, revise and evaluate work as it progresses
- D evaluate appropriate digital technologies to enhance existing ,or allow new, learning activities.

Key questions

To support the learning process, candidates will explore the following key questions:

- What digital technologies are available locally? To what extent do they use them?
- How are digital technologies used to support learning by their colleagues, either in their own school or in other local schools that they have access to?
- Where digital technologies are used, what evidence is there that they are used effectively, i.e. do they actually support learners' learning?
- How do they choose whether to use digital technologies in their lessons, and how do they choose which technology to use? What criteria should they use?
- Are there certain skills that digital technologies are particularly good at developing? To what degree are these skills important in particular curriculum areas?
- How does using digital technologies in a particular curriculum area differ from its use in other areas? Why?

Assessment

Candidates will:

- conduct an audit of locally available digital technologies and describe how they are used to enhance existing, or allow new, learning activities
- within their own school context, identify appropriate digital technologies and related activities that could develop their learners' ability to:
 - work collaboratively
 - find things out and construct knowledge
 - take responsibility for their own learning
 - solve real-world problems and make things happen
 - share information and communicate effectively with others
 - review, adapt, revise and evaluate work as it progresses
- identify and observe an experienced teacher as they teach a lesson using digital technologies – candidates may wish to discuss with this teacher their views on using digital technologies, either before or after the lesson
- discuss with their mentor how the teacher used digital technologies to support learning, and the key features of an effective lesson.

In their portfolio, candidates must submit:

Evidence of practice:

- *an audit of locally available digital technologies and the ways in which they are used (Local Technologies Audit)*
- a completed *Observation Visit Form*
- a copy of the observed experienced teacher's lesson plan.

Evidence of learning (800 words):

- an analysis of the ways the available technologies could be used to support learning within their own school
- an analysis of how their school could benefit from the specific opportunities that the technologies allow
- a description of the observed lesson and their discussions with their mentor, identifying the key teaching and learning activities used.

Evidence of reflection (400 words):

- an analysis of their findings from Unit 1, identifying the key features that could make a specific digital technology resource effective in supporting learning
- an evaluation of the impact their new learning and experiences from Unit 1 will have on their practice as they prepare for Unit 2.

Candidates may also submit in their portfolio digital images of key moments in the lesson. If submitted, these images should be referred to in the *Evidence of reflection*.

Unit 2 Teaching a lesson with digital technologies

Learning outcomes

Candidates will explore the practice of teaching lessons with digital technologies, from planning through to evaluation. They will engage with associated concepts and principles, so they can:

- E plan a lesson that uses one or more digital technologies to support learning
- F teach the lesson with confidence, using suitable classroom management techniques, and responding appropriately to unexpected events
- G provide a positive learning experience for all learners in the lesson and monitor the effect of using digital technologies on their learning
- H evaluate the effectiveness of the lesson and the associated digital technologies in supporting learning.

Key questions

To support the learning process, candidates will explore the following key questions:

- How do they apply the criteria they have developed for choosing (or rejecting) particular digital technologies in a lesson?
- What are the key aspects in preparing a lesson that uses digital technologies? How can they best prepare?
- What practical issues are there in using digital technologies in the classroom? How can they deal with these?
- How can they gauge the effects of using a particular technology on their learners' learning?
- How can they make sure that the technology is helping the learning to be inclusive for all learners?
- How can they evaluate the lesson to provide useful data?

Assessment

Candidates will:

- plan and teach a lesson in which they use digital technologies to support a specific learning objective, and take advantage of one of the specific opportunities that technology supports
- discuss their plan with their mentor
- arrange for the lesson to be observed by their mentor, to receive formative feedback for reflection.

In their portfolio, candidates must submit:

Evidence of practice:

- a completed *Lesson Plan*
- a completed *Observer Feedback Form* based on the *Lesson Plan*
- *Samples of Learners' Work* in the lesson.

Evidence of learning (600 words):

- an explanation of the structure of their lesson and how they intended to use the digital technologies they selected
- a justification of their choice of digital technologies in relation to the learning objectives of the lesson
- a comparison of this experience with how they would have taught the lesson without digital technologies.

Evidence of reflection (600 words):

- an analysis of the lesson in terms of learning and using digital technologies
- an analysis of the aspects of their teaching practice and their learners' learning with digital technologies that need improvement.

Candidates may also submit in their portfolio digital images of key moments in the lesson. If submitted, these images should be referred to in the *Evidence of reflection*.

Unit 3 Evaluating the use of digital technologies to support teaching and learning

Learning outcomes

Candidates will further explore the practice of teaching and learning with digital technologies so they can:

- I develop their judgement in selecting and using digital technologies
- J use feedback from a variety of sources to identify strengths and areas for further development in professional practice
- K apply principles and concepts concerning using digital technologies in reflecting on issues experienced in their own practice
- L begin to identify and use suitable opportunities for sharing with colleagues their experiences of teaching with digital technologies.

Key questions

To support the learning process, candidates will explore the following key questions:

- What are the advantages and disadvantages of the various ways of evaluating the effectiveness of a particular digital technology in supporting learning?
- What issues are school colleagues experiencing when using digital technologies in their curriculum areas? Are these shared or individual?
- What principles and concepts in teaching and learning with digital technologies appear to be established? Why? What is the evidence that supports them?
- Should digital technologies be seen as an essential part of the learning process?
- How can feedback be gathered and analysed to be as useful as possible?
- How far should they, or can they make using digital technologies an integral part of their own teaching?

Assessment

Candidates will:

- keep a reflective journal of their experience in teaching with digital technologies, as they apply their learning of new ideas and approaches during the Certificate
- select and analyse two different teaching and learning episodes from this experience, which in their judgement present teaching and learning issues relating to using digital technologies
- gather feedback on their teaching from a variety of sources, including observations by colleagues, learner feedback, and discussions with their mentor
- share with colleagues their experiences of teaching with digital technologies.

In their portfolio, candidates must submit:

Evidence of practice:

- *brief extracts from their reflective journal* which highlight the issues arising in the two teaching and learning episodes (*Reflective Journal Extracts*)
- a *Summary of Feedback* from colleagues and learners
- two *Examples of Interactions* with colleagues to share experiences.

Evidence of learning (400 words):

- an explanation of why they have selected the two episodes
- an explanation of the issues raised in these episodes
- an analysis of how the issues raised may be addressed.

Evidence of reflection (800 words):

- an evaluation of the effects of feedback from colleagues and learners on developing their own practice
- an evaluation of what they have learnt from sharing ideas and experiences with colleagues
- an evaluation of how their thinking and practice in teaching with digital technologies have developed during the programme, and can develop further.

Assessment criteria

Candidates will be assessed for the Certificate according to the following criteria, applied to the portfolio of evidence as a whole:

- Understanding teaching and learning with digital technologies
- Developing thinking and practice in teaching with digital technologies
- Analysis and discussion
- Communication and presentation.

DISTINCTION	
Understanding teaching and learning with digital technologies	Demonstrates a well-focused understanding of relevant concepts and principles, with evidence of analysis of strengths and weaknesses. Applies relevant concepts and principles to own practice, with evidence of critical evaluation and limitations.
Developing thinking and practice in teaching with digital technologies	Evidences effective practice, with a well-focused understanding of relevant theories and principles underlying practice in teaching, and applied to own practice. Evidence of reflective evaluation of own practice, and identification of learning from experience.
Analysis and discussion	Analyses questions and issues arising from study, enquiry, discussion and experience, in a well-focused manner, supported by relevant and useful examples drawn from valid and reliable evidence. Evidence of a range of information sources to inform the analysis and discussion. Well-structured work.
Communication and presentation	Presents ideas, arguments and information in a well-structured and consistent manner. Professional approach to presentation of work, with opinions only given when justified and/or backed up by evidence. Academic conventions followed, with appropriate referencing to published work or other accepted sources of evidence.

PASS	
Understanding teaching and learning with digital technologies	Demonstrates a broad understanding of relevant concepts and principles, and is able to apply these in a meaningful way to own practice.
Developing thinking and practice in teaching with digital technologies	Evidences effective practice, with a sound and largely accurate understanding of relevant theories and principles underlying practice in teaching. Some evidence of application of theories and principles to own practice. Some evidence of reflective evaluation.
Analysis and discussion	Analyses questions and issues arising from study, enquiry and experience in a sound and largely appropriate manner. Some use of relevant examples drawn from sound evidence. Use of some different information sources to inform discussion and analysis. Structured approach to analysis and discussion.
Communication and presentation	Presents ideas, arguments and discussions in an orderly and generally consistent manner. Professional approach to presentation of work. Opinions may be expressed at times without evidential or other accepted support. Academic conventions mostly followed, with attempt to reference appropriately.

FAIL	
Understanding teaching and learning with digital technologies	Demonstrates inadequate or poor understanding of relevant concepts and principles. Application to own practice may be very limited, inadequate or inappropriately applied.
Developing thinking and practice in teaching with digital technologies	Little or poor evidence of linking effective practice with theories and principles. Limited or inaccurate understanding of relevant theories and practice. Little evidence of application of theories and principles to own practice.
Analysis and discussion	Descriptive accounts, with inaccuracies and misunderstandings in places. Opinions and views expressed, but without links to evidence and/or relevant examples. Work likely to be poorly organised and structured.
Communication and presentation	Work demonstrates significant weaknesses in presentation and may be poorly structured, not well organised and not presented in a professional manner. Opinions may be given at length without any attempt to provide support from other sources.

3. Cambridge International Diploma in Teaching with Digital Technologies

Introduction to the Diploma

Aims

In the Diploma, teachers will have the opportunity to:

- understand principles, concepts and issues concerning using digital technologies to support learning, and relate these critically to their own practice
- engage with educational theory and research evidence to inform and develop their professional thinking concerning digital technologies in education
- improve their ability to reflect on and evaluate the effectiveness of digital technologies in supporting learning, and to adapt their planning and teaching as appropriate
- develop their confidence to experiment and innovate with a growing range of opportunities offered by digital technologies
- develop their ability to reflect on their own experiences, and those of others, of using digital technologies, so that they can critically assess using such technologies in teaching and learning
- develop their confidence in sharing their practice with fellow practitioners, and their ability to select, adapt and use ideas from the wider educational community, including their own learners.

Structure

The Diploma comprises three modules related to practice:

Module 1	Exploring teaching and learning with digital technologies
Module 2	Developing reflective practice in teaching with digital technologies
Module 3	Reviewing the impact of digital technologies on education

For the Diploma, candidates must achieve a pass or distinction in Module 1 to progress to Module 2. Modules 2 and 3 will then deepen and extend their knowledge, understanding and skills, and lead to the award of the Diploma. Candidates must achieve a pass or distinction for Module 2 before entering for Module 3.

Each module is set out below in terms of its learning outcomes, key questions, assessment approach and evidence requirements, and assessment criteria.

- Each **learning outcome** specifies what a candidate is expected to know, understand and/or be able to demonstrate after completing the process of learning in the module.
- The **key questions** in each module show how professional learning can be focused.
- The **assessment approach and evidence requirements** explain how candidates can show that they have achieved the learning outcomes.
- The **assessment criteria** are used by Cambridge examiners in their judgements on the quality of the evidence presented. They specify what the candidate is expected to do to demonstrate that they have achieved a learning outcome.

Candidate requirements

Candidates need to:

- be a full- or part-time teacher, teaching in an educational institution such as a school, college, university or adult training centre
- teach in their current school over a full academic year, for a minimum of 24 weeks and a minimum of six hours per week
- have the regular support of a mentor who understands the essential principles that underpin this qualification, and can provide helpful advice and observations
- teach the same learner group for the activities planned for in Modules 2 and 3
- teach a group of a minimum of six learners
- be responsible for planning and facilitating the learning activities of their learners.

Language Requirements

Candidates are required to have sufficient competence in English to participate in the qualification. All candidates should have English language competence comparable to Level B2 in the *Common European Framework of Reference for Languages* (CEFR).

We recommend a minimum requirement of 5.5 on the *International English Language Testing System*.

Further information may be obtained through the Council of Europe website:

[http://coe.int/t/dg4/education/elp-reg/cefr_grids EN.asp](http://coe.int/t/dg4/education/elp-reg/cefr_grids_EN.asp)

The IELTS website: **www.ielts.org/**

Evidence requirements

In each module portfolio, candidates use the relevant Cambridge templates to gather, organise and present their evidence to satisfy the assessment criteria.

In the introduction to the portfolio, candidates confirm that they meet the candidate requirements and provide background information about their professional experience and role, and the context in which they teach. This is their opportunity to indicate significant influences on their work and professional development. This introduction is not assessed or judged, but helps the examiner to understand and interpret evidence and reflections.

The Diploma is designed so that candidates can demonstrate their professional thinking and practice as clearly and efficiently as possible. The evidence required matches the learning outcomes. In their portfolio, candidates provide evidence of their:

- *practice* – actual teaching practice
- *learning* – newly acquired knowledge, skills and understanding
- *reflection* – skills in analysing, synthesising and evaluating their experiences to develop their future professional practice.

With written evidence, candidates should keep to the word limits and respond to the prompts in templates succinctly. The prompts indicate how to focus and shape their explanations, reflections and other evidence. Candidates must also follow Cambridge's rules for the format and size of digital evidence such as images.

Candidates' reflections should reference other people's thoughts and experiences, whether these are in the form of academic publications, or posts to online discussion forums or blogs. All sources must be clearly referenced.

Module 2 Developing reflective practice in teaching with digital technologies

Learning outcomes

In this module, candidates will explore their teaching and learning practice more deeply and critically so they can:

- M design a sequence of lessons (programme plan or scheme of work) that uses one or more digital technologies to support specific learning objectives, and takes advantage of the specific opportunities that digital technologies allow
- N plan lessons supported by appropriate digital technologies that are inclusive, and offer opportunities for all learners to participate and learn
- O implement the lessons with confidence, using suitable classroom management techniques, responding appropriately to unexpected events and ensuring a positive learning experience for all learners
- P show an awareness of a variety of evaluation tools and techniques, and of sources of feedback
- Q reflect on their experiences in order to evaluate and improve their practice with digital technologies so that learners learn more effectively
- R use appropriate techniques and tools, to evaluate the effectiveness of the lessons, and the associated digital technologies in supporting learning.

Key questions

To support the learning process, candidates will explore the following key questions:

- What challenges do teachers face in making sure that their design intentions concerning using digital technologies are realised in practice?
- How should 'appropriate' be defined when describing using digital technologies to support teaching and learning?
- How does one know that using digital technologies was 'effective' in practice?
- What evaluation tools are particularly helpful for critical appraisal of the effectiveness of digital technologies?
- How can the range of evaluation tools be best used over the course of a learning programme?
- How can reflection on teaching and learning in a programme be enriched by the experiences of colleagues and other external sources?

Assessment

The assessment in Module 2 focuses on the reflective practice of candidates. Candidates select a particular sequence of lessons within their overall teaching programme. They should select a lesson sequence that is most relevant and interesting to themselves, their learners and to their schools, in the light of the new ideas and approaches they want to apply in practice. In their evidence, they will analyse and evaluate two lessons in particular. These lessons must be in sequence.

Candidates will:

- plan and teach a sequence of lessons (programme plan) with:
 - at least 10 hours of contact time
 - at least five consecutive lessons of 40–120 minutes each
 - a minimum of six learners in the group
- plan two sequential lessons from the programme plan
- teach the two lessons
- obtain feedback from the observer in the two lessons
- obtain evaluation data from suitable sources for these lessons, including learner feedback.

In their portfolio, candidates must submit:

Evidence of practice:

- a *Programme Plan* for the sequence of lessons taught
- their *Lesson Plans* for the two particular lessons
- one *Learning Activity* using digital technologies that they designed and used in one of the two lessons – this should give evidence of innovation (something new) in their teaching practice and of learning being inclusive
- samples of *Learning Resources* used, for example worksheets
- *samples of learners' work*
- a completed *Observer Feedback Form* for each of these two lessons
- a completed *Summary of Learner Feedback Form* and four samples of learner feedback from the two lessons (two from each lesson).

Evidence of learning (1600 words):

Based on the two taught sequential lessons:

- a description of how the programme plan was designed to integrate using digital technologies to support learning
- an explanation of how the used technologies were selected
- an explanation of how the specific technologies were used in the lessons, to support learning and ensure all learners were able to take part
- an explanation of how the teacher responded to the feedback from learners during the lessons, and adapted learning activities in response.

Evidence of reflection (2000 words):

Based on the two taught sequential lessons and their experiences during this module:

- a discussion of the factors a teacher needs to take into account when selecting and using digital technologies in their teaching
- an evaluation of the two lessons:
 - focusing on the role of digital technologies
 - highlighting what worked well and why, and what did not work well and why
 - explaining what developments should be made in future practice
- an evaluation of the programme as a whole, focusing on the issues experienced in using digital technologies and their effect on the quality of learning
- an evaluation of their teaching practice and the learners' learning, using feedback from a variety of sources to identify existing strengths and those aspects that need further development.

Candidates may also submit in their portfolio digital images of key moments in the lessons. If submitted, these images should be referred to in the *Evidence of reflection*.

Module 3 Reviewing the impact of digital technologies on education

Learning outcomes

In this module, candidates will develop their perspectives on the pedagogical use of digital technologies. They will have the opportunity to:

- S demonstrate the ability to critically analyse their own and others' experiences
- T reflect on their experiences in order to critically assess the wider effects of digital technologies on education and curriculum, the role of the teacher and schools, and the ability of learners to direct their own learning both in and out of school
- U begin to show awareness of a range of theoretical positions relating to using digital technologies in learning, and to relate these to their own experiences
- V identify and use suitable opportunities for sharing experiences with digital technologies with fellow practitioners, including those in other curriculum areas and schools
- W develop their awareness of developments in digital technologies, and their possible usefulness in supporting learning
- X evaluate their experience in the Diploma and plan the next steps in their further professional development in teaching with digital technologies.

Key questions

To support the learning process, candidates will explore the following key questions:

- How has the pedagogical use of digital technologies developed over the last five years? What possible developments are likely in the next five years?
- How far does thinking and practice about teaching with digital technologies vary between schools, systems and cultures? What factors influence variation?
- What are the most significant effects of digital technologies on education, schools, the curriculum and the role of teachers and learners?
- How far do existing structures and processes of teaching and learning shape the use of digital technologies?
- What theoretical positions about the use of digital technology appear most helpful to the teacher? Why?
- In what ways can they continue learning about using digital technologies to support teaching and learning? How can they share what they have learnt with colleagues? How can they find out what colleagues have done?

Assessment

As part of their practice, candidates will:

- reflect and learn from their Diploma experiences to plan for future developments to their professional practice – this will allow learners to progress in their learning, supported by digital technologies.

In their portfolio, candidates must submit:

Evidence of practice:

- their completed *Professional Development Plan*.

Evidence of learning and reflection (2400 words):

Based on their Diploma experiences, their interactions with colleagues and their critical engagement with resources and reading:

- an evaluation of the extent to which their role as a teacher, and the experience of the learner, changes during lessons that use digital technologies
- a discussion of the impact of relevant educational theory and research on their practice, and on their learners' learning
- a review of how their personal views of the effectiveness of digital technologies in supporting learning have developed
- a discussion of how their ability and willingness to integrate digital technologies into their teaching has changed
- a review of the opportunities that exist for them to share their experiences of teaching with digital technologies with fellow teachers, and how these opportunities have been taken.

Assessment criteria

Candidates will be graded for each module according to the following criteria, applied to the portfolio of evidence as a whole:

- Understanding teaching and learning with digital technologies
- Developing thinking and practice in teaching with digital technologies
- Analysis and discussion
- Communication and presentation

To achieve a Distinction in the Diploma, a candidate must achieve at least two module Distinctions.

DISTINCTION	
Understanding teaching and learning with digital technologies	Demonstrates a detailed, accurate and well-informed understanding of key concepts and principles, with some evaluation of different ideas or approaches. Evidence of some sustained critical analysis and evaluation in their application to both their own and others' practice.
Developing thinking and practice in teaching with digital technologies	Evidences effective practice in detail and with insight, and with awareness and appropriate analysis of how different theories and principles apply to practice. Well-developed application of a number of theories and principles to own practice. Well-developed reflective evaluation of own practice and specific ways of learning from experience.
Analysis and discussion	Analyses, with insight and in detail, questions and issues drawn from relevant and topical studies, enquiries and experience. Relevant and appropriately depicted examples drawn from well-established evidence. Range of different and relevant information sources to inform analysis and discussion. Well-structured approach.
Communication and presentation	Presents ideas, arguments and information in a well-structured, consistent and clearly expressed manner. Presentation of work is highly professional, and views/opinions supported by external reference to relevant sources. Academic conventions followed consistently throughout the work, with referencing to published or other accepted sources of evidence that are current.

PASS	
Understanding teaching and learning with digital technologies	Demonstrates a sound and informed understanding of key concepts and principles, with an awareness of different ideas or approaches. Analyses and evaluates application of key concepts and principles to both their own and others' practice.
Developing thinking and practice in teaching with digital technologies	Evidences effective practice, with detail, in some areas. Thorough and informed understanding of how different theories and principles apply to practice. Sound application of theories and principles to practice. Evidence of reflective evaluation of own practice, and some insight into learning from experience.
Analysis and discussion	Analyses questions and issues arising from appropriate studies, enquiries and experience, appropriately and with relevance. Evidence of use of different information sources to support discussion and analysis. Structured approach to analysis and discussion.
Communication and presentation	Presents ideas, arguments and information in a well-ordered manner, with sound levels of consistency and expression. Professional presentation of work, with use of external sources of evidence. Academic conventions followed, with use of accepted referencing conventions.

FAIL	
Understanding teaching and learning with digital technologies	Demonstrates inadequate or poor understanding of relevant concepts and principles. Application to own and others' practice may be limited, inadequate or inappropriately applied. Application to others' practice may be absent.
Developing thinking and practice in teaching with digital technologies	Little or poor evidence of linking effective practice with theories and principles. Limited or inaccurate understanding of relevant theories and practice. Little evidence of application of theories and principles to own practice.
Analysis and discussion	Descriptive approach, with some inaccuracies and misunderstandings in places. Opinions and views expressed, but poor or inappropriate links to evidence and/or relevant examples. Work likely to be poorly organised and structured.
Communication and presentation	Work demonstrates weaknesses in presentation and may be poorly structured and not presented in a professional manner. Opinions may be given without any attempt to provide support from other accepted external sources.

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