



Syllabus

Cambridge International Certificate **Teaching with Digital Technologies 5885** For examination in 2025 to 2030



Why choose Cambridge?

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

They help candidates to:

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

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

The Cambridge International Certificate in Teaching with Digital Technologies is for candidates who want to:

- engage with the principles and concepts of teaching and learning with digital technologies to improve their effectiveness as teachers
- gain the knowledge, skills and understanding to support an inclusive approach to teaching and learning with digital technologies
- use opportunities to try something new in their classroom practice
- engage with colleagues to improve professional knowledge and practice
- develop a reflective approach to the development of their professional practice
- progress their teaching career.

Research indicates that effective 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 their existing knowledge, skills and understanding of teaching and learning
- enriches teachers' learning through critical engagement with the theories of others
- is sustained over time and supported by people with expertise.

The Certificate is designed to provide for such professional development.

School feedback: 'Innovation, enlightenment and reinvention of perspective is key in the PDQ journey of the candidates, programme leaders and learners. Embracing and challenging one's self by incorporating digital technologies in the learning and teaching environment creates opportunities and possibilities for school leaders which may not have existed earlier. Hence, it enables them to make provisions and policies to equip learners for the future.'

Feedback from: Jennifer Johnson, Head of Digital Learning – Innovation & Resources, Karachi Grammar School (Middle Section), Karachi, Pakistan

Contents

Why choose Cambridge?	2
1 Introduction	4
Purpose of this document	4
Quality	4
2 The Cambridge teacher	5
Cambridge School Leader and Teacher Standards	5
Cambridge Teacher Standards	5
How to use the Standards	6
3 Syllabus overview	7
The PDQ Programme Leader	7
The Certificate syllabus	7
Eligibility	8
Language requirements	9
What is the qualification structure?	9
What does the Certificate involve?	10
How is the Certificate assessed?	11
Evidence requirements	11
Reflective journal	12
4 Certificate in Teaching with Digital Technologies	13
Introduction to the Certificate	13
Module 1 Exploring teaching and learning with digital technologies	14
Unit 1 Understanding the potential of digital technologies to support learning and teaching	14
Unit 2 Teaching a lesson with digital technologies	17
Unit 3 Evaluating the use of digital technologies to support teaching and learning	20
Assessment criteria	23
5 Support and resources for PDQ programmes	25
What is PDQ Connect?	27
6 Glossary	28

1 Introduction

Purpose of this document

This syllabus sets out the details of the Certificate in Teaching with Digital Technologies. This is a Cambridge Professional Development Qualification (PDQ) offered by Cambridge International Education.

The syllabus focuses on the learning outcomes and related scheme of assessment. For further guidance on the design principles and features of programmes leading to these qualifications please see the resources for Cambridge Professional Development Centres.

These are available at www.cambridgeinternational.org/pdq

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Quality

Cambridge PDQs are benchmarked to the Framework for Higher Educational Qualifications (FHEQ) for England, Wales and Northern Ireland. Cambridge PDQ Certificates are benchmarked to FHEQ Level 4 and Diplomas to FHEQ Level 5.

This means that teachers and leaders achieving a Cambridge PDQ are well prepared for their next step in the professional development pathway and their Cambridge PDQ has value as they progress to relevant Level 6 and 7 programmes.

School feedback: ‘The PDQ lays the framework of whole school collaboration and coherently brings learners, candidates, professional development community and school leaders together by consciously encouraging them to reflect, collaborate, think critically and work towards development of self while establishing a bird’s eye view of their role in the process.’

Feedback from: Jennifer Johnson, Head of Digital Learning - Innovation & Resources, Karachi Grammar School (Middle Section), Karachi, Pakistan.

2 The Cambridge teacher

Cambridge International programmes and qualifications develop not only subject knowledge and skills but also attitudes, ways of thinking and behaviours.

There are five Cambridge teacher attributes. Cambridge teachers are:

- **confident** in teaching their subject and engaging each learner in learning
- **responsible** for themselves, responsive to and respectful of others
- **reflective** as learners themselves, developing their practice
- **innovative** and equipped for new and future challenges
- **engaged** intellectually, professionally and socially, ready to make a difference.

More information about teaching Cambridge at your school can be found at:

www.cambridgeinternational.org/support-and-training-for-schools/leading-learning-and-teaching-with-cambridge

Research indicates that effective 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 effective 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
- ensuring formative assessment is embedded in classroom practice
- making connections, for example, to learners' experiences, 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.

Cambridge School Leader and Teacher Standards

Our Cambridge Teacher and School Leader Standards define what we believe to be key characteristics of effective teaching and leadership. They focus on supporting teachers and leaders, and they offer an opportunity for self evaluation which helps them to understand their professional learning and development needs.

The Standards are based on the latest international research into effective teaching and school leadership, taking into account a wide range of international practices and advice from education experts around the world.

Cambridge Teacher Standards

The Cambridge Teacher Standards can be used to:

- evaluate current teaching practice
- help identify, prioritise and plan areas for professional development

- understand the teaching requirements for Cambridge programmes in order to achieve the desired learner outcomes.

How to use the Standards

The Standards can be used to evaluate teaching or school leadership by asking key questions and looking for examples from practice. By using our self-reflection surveys teachers can identify where they are now and which areas they need to improve. This would be a really useful exercise to undertake while planning a PDQ programme. It could also be used again to evaluate the programme's impact.

You can download the Standards, self-reflection surveys and online guide from:

www.cambridgeinternational.org/support-and-training-for-schools/professional-development/professional-development-qualifications/school-leader-teacher-standards

3 Syllabus overview

The PDQ Programme Leader

Every Cambridge PDQ Centre appoints a Programme Leader who is responsible for designing and managing the programme. The Programme Leader is pivotal to the quality and success of the Cambridge PDQ programme. The role is wide-ranging, from designing and developing the programme to liaising with mentors, school leadership and Cambridge International. Being an effective Programme Leader is about shaping and supporting professional learning to have an impact on the quality of teaching and leadership in schools.

Programme Leaders evaluate their professional development learning programme as part of their commitment to professional development. Due to the level of support they are required to give candidates during the programme, Programme Leaders are not permitted to compile their own portfolio of evidence and submit it to Cambridge International as part of their own PDQ Programme.

The Certificate syllabus

The Certificate is designed to help teachers use digital technologies effectively and appropriately in supporting their learners' learning. The qualifications encourage candidates 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.

The qualification is for practising teachers, focusing on the development of knowledge, skills and understanding in the key aspects of teaching with digital technologies. PDQs are inclusive and relevant to all teaching and learning contexts: from primary and secondary general education, to vocational education and training, and to further, adult and higher education. They help candidates to explore and apply new ideas in their own context, integrate new approaches in their own practice, and demonstrate their professional development as reflective practitioners.

Two essential principles underpin the design of the qualifications: effective teaching and effective professional development.

The programme involves a spiral of professional learning, each stage being 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 candidate can engage with these in more depth and detail, and acquire related knowledge and skills.

The spiral of professional learning in a Cambridge PDQ programme depends particularly on three processes:

- observation
- reflection
- learning with and from mentors.

These processes work together. It is crucial that candidates receive feedback from being observed to inform their continuous reflection on their learning experiences. Observation and reflection are much more effective with the support of a mentor.

The mentor develops a learning relationship with the candidate, supporting them during their work-based learning to make the most of the learning experience and to achieve the Cambridge qualification. The mentor understands the essential principles of the Cambridge PDQ, and provides helpful advice to their candidate, sharing their own experiences and knowledge.

Eligibility

Candidates **must**:

- be a full or part-time teacher employed in an educational institution such as a school, college, university, or adult training centre
- teach in their current institution 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, teaching and formatively assessing groups of learners.

Candidates who do not meet the above criteria cannot make an entry for this syllabus. Those candidates may meet the criteria for syllabus 5880.

School feedback: ‘Having the continued support and guidance of mentors throughout the PDQ course have been invaluable for both our candidates and the mentors themselves. We have seen an improvement in reflective practice and an increase in willingness to experiment with best practices. The candidates find they have a safe space to collaborate, share their experiences and ask for advice. This has empowered and made them more open to developing their practice.’

Feedback from: Melissa Alberts, Professional Development Officer, GenEx Institute, Cape Town, South Africa

Language requirements

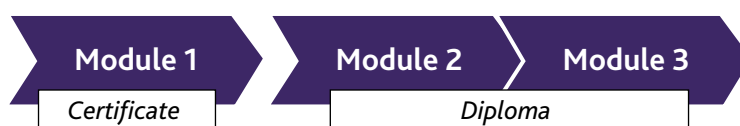
To take part in the Certificate programme candidates are required to have sufficient competence in English. All candidates should have English language competence comparable to **Level B2** in the **Common European Framework of Reference for Languages (CEFR)**. This framework is provided by the Council for Europe. Further details can be found on the Council's website at <http://coe.int/t/dg4/education/elp-reg/cefr-grids-EN.asp>

We recommend a minimum requirement of 5.5 on the International English Language Testing System. See www.ielts.org/ for more details.

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.

The Diploma can also be taken as a standalone qualification.

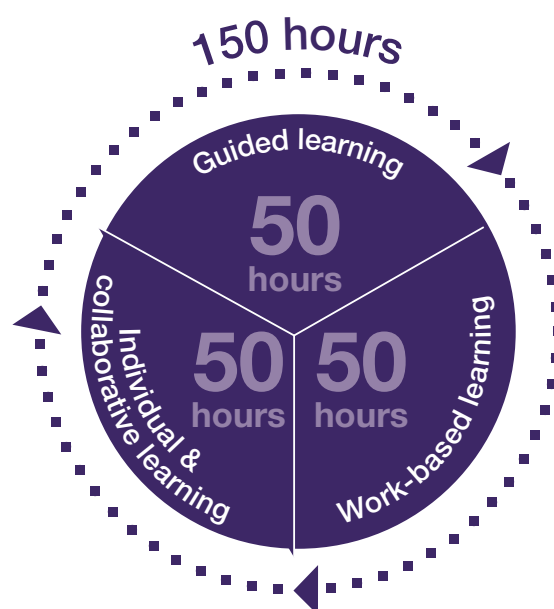


The table below shows what is involved in each module.

Learning hours in preparation	150
Recommended programme duration	4 months per module
Assessment	Portfolio of evidence of practice, learning and reflection
Evidence length	3600 words with work-based records

What does the Certificate involve?

A typical Certificate programme run by a Cambridge Professional Development Centre consists of a broad balance of activities, appropriate to the needs and circumstances of teachers and their schools. 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.



Centres must provide at least 50 hours of guided learning for each module. Candidates 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.

In each unit, candidates engage with the required learning outcomes through a series of activities closely related to their everyday professional work. The activities and related reflections produce evidence for assessment.

The mentor plays a vital role in supporting a candidate. Through discussion and questioning, mentors encourage candidates to reflect on their learning and on what it means for their approaches to teaching. They also help candidates to demonstrate through examples and accounts of practice that they are:

- acquiring new skills
- learning how to use their new skills and knowledge
- linking changes in classroom practice to improvements in learner outcomes.

How is the Certificate assessed?

Candidates are assessed through a portfolio of evidence, submitted to a team of Cambridge International examiners. In their portfolio, candidates demonstrate their knowledge, skills and understanding in the context of their own work. Portfolio evidence includes:

- observing a colleague's classroom practice
- planning, teaching, learning and assessment materials that arise naturally out of the teaching process
- feedback from mentor, colleagues, learners and others
- the candidate's own reflections on their learning and practice.

In their evidence of learning and reflection, a candidate's views, ideas or opinions must be supported with relevant references to established concepts and theories of learning and teaching, whether these are in the form of academic publications or posts to online discussion forums or blogs. All sources must be referenced.

School feedback: 'The Cambridge PDQs are a journey of self-discovery, reinvention, profound personal and professional introspection of the candidates' pedagogy and praxis; cascades to the learners and enriches their 21st century skills by fostering the Cambridge Learner Traits. It allows school leaders to reignite their connection with impactful and significant theories and reflect on themselves as per authentic international standards.'

Feedback from: Jennifer Johnson, Head of Digital Learning - Innovation & Resources, Karachi Grammar School (Middle Section), Karachi, Pakistan

Evidence requirements

In their portfolio, candidates will use the relevant Cambridge International templates (*Forms*) to gather, organise and present their evidence to satisfy the assessment criteria.

In the introduction to the portfolio, candidates 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. Although the introduction is not formally assessed or judged, it does help the examiner to understand the teaching context and interpret the subsequent assessment evidence. Please note, however, that a curriculum vitae is not required.

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 International's rules for the format and size of digital evidence, such as images and video.

Candidates' reflections should provide references for other people's ideas 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.

The Programme Leader can provide further guidance on academic honesty.

Reflective journal

Candidates will maintain a reflective journal throughout their programme of learning. By keeping a journal, candidates will more effectively evaluate their practice and develop reflective skills which will underpin their professional development.

For further support on reflective practice see:

www.cambridgeinternational.org/teaching-and-learning/getting-started-with/

School feedback: ‘Reflective practice is at the heart of what makes teaching a lifelong journey of discovery. Not only does it help teachers to improve learner learning outcomes, classroom management practice, and the application of learning theory in the classroom, but it also helps teachers to stay connected to the joy and adventure of teaching.’

Feedback from: Dr. Russell Hazard, Director of Teaching, Learning, and innovation – NIT Education Group

School feedback: ‘PDQ has provided the framework to articulate, formalise and enhance the things I was doing naturally as a teacher, it has encouraged me to be a reflective practitioner and to back my intuition.’

Feedback from: Mrs Wendy H McCabe, Head of Art and Design, Head of Drama, Hebron School, Tamil Nadu, South India

4 Certificate in Teaching with Digital Technologies

Introduction to the Certificate

Aims

In the Certificate, candidates will have the opportunity to:

- understand principles, concepts and issues concerning the use of 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.

Candidates can work towards the Certificate at their own pace, depending on their priorities and circumstances. Certification provides an international quality mark, enhancing their professional profile, and opening pathways for their further professional and career development.

Structure

The Certificate comprises three units related to practice which together form Module 1: Exploring teaching and learning 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 in terms of its learning outcomes, key questions, assessment approach and evidence requirements. Assessment criteria appear at the end of this section.

- Each **learning outcome** is a statement that defines the expected goal of a curriculum, in terms of demonstrable skills or knowledge that will be acquired by the candidate.
- The **key questions** show professional learning related to each learning outcome. These questions will support the candidate as they explore the knowledge required to meet the learning outcome.
- 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 International examiners in their judgements on the quality of the evidence presented. They specify what the candidate is expected to do in order to demonstrate that they have achieved a learning outcome.

Module 1 Exploring teaching and learning with digital technologies

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

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 start relating these to commonly accepted theories of teaching and learning with digital technologies and to specific learning objectives for their learners in their particular professional context.

Learning outcomes

- A:** Analyse how a range of locally available digital technologies support existing, or allow new, learning activities.
- B:** With reference to relevant concepts, principles and theories, explore how and why digital technologies can be used within their own practice to support teaching and promote learning.
- C:** Within their own school context, investigate how learning activities using digital technologies allow learners to develop twenty-first-century skills.
- D:** Evaluate digital technologies to support teaching and promote learning.

Learning outcomes and key questions

Learning outcome A: Analyse how a range of locally available digital technologies support existing, or allow new, learning activities.

- What do we mean by teaching and learning with digital technologies?
- What hardware and software are available in your local context, and how can learners with access issues be supported with using them?
- Which digital technologies do your learners have access to, and how can these be useful for learning?
- How are the locally available digital technologies used to support teaching and promote learning?
- How often are the locally available digital technologies used for teaching and learning?

Learning outcome B: With reference to relevant concepts, principles and theories, explore how and why digital technologies can be used within their own practice to support teaching and promote learning.

- Why is it important to use digital technologies for teaching and learning in your practice?
- Which concepts, principles and theories apply to the use of digital technologies for teaching and learning in your practice?
- Which learning objectives are digital technologies particularly useful for?
- How have you already used digital technologies for teaching?
- How have your learners already used digital technologies for learning?

Learning outcome C: Within their own school context, investigate how learning activities using digital technologies allow learners to develop twenty-first century skills.

- What do we mean by twenty-first century skills?
 - Which skills can digital technologies help develop?
 - Which digital tools can help develop a particular skill?
 - How are you monitoring the development of learners' skills?
 - What evidence is there that digital technologies promote learning?
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Learning outcome D: Evaluate digital technologies to support teaching and promote learning.

- What features or functionalities of the digital technologies used to support teaching and promote learning could you analyse and evaluate?
 - How could digital technologies make your lesson more effective?
 - What digital technologies are specifically useful for teaching and which ones are particularly useful for learning?
 - How do you choose which digital technology to use for which purpose?
 - How might lessons using digital technologies differ from those that do not?
-

The role of the mentor in Unit 1

The mentor, with the candidate, will observe a lesson delivered by a teacher who is experienced in using digital technologies in the classroom. The mentor will hold a post-observation discussion with the candidate to support their learning on what makes an effective lesson. This discussion will provide the basis of the candidate's evidence of reflection.

Assessment

Candidates will:

- explore what digital technologies are available locally and analyse 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 can develop their learners' abilities and at least two of the following twenty-first century skills.
 - Critical thinking, creativity, innovation, real-world problem solving and constructing knowledge
 - Collaboration and communication, sharing information and working effectively with others
 - Information literacy, media and technology literacy
 - Flexibility, adaptability, leadership, initiative and productivity
 - Self-direction by reviewing, revising, evaluating and taking responsibility for their own learning
 - Social and cross-cultural skills, participating in the local and wider community
- identify and observe an experienced teacher as they teach a lesson using digital technologies
- either before or after observing the experienced teacher's lesson, discuss with that teacher their views on using digital technologies
- discuss with their mentor how the experienced teacher used digital technologies to support learning, and the key features of an effective lesson.

In the portfolio, candidates must submit the following.

Evidence of practice – This includes:

- *Module 1: Unit 1 Review of locally available digital technologies Form*
- *Module 1: Unit 1 Observation Visit Form*
- a copy of the lesson plan for the lesson they observed.

Evidence of learning (800 words)

- 1 Analyse the ways that locally available digital technologies are used to support teaching and promote learning.
- 2 Explain how learners can benefit from the specific opportunities that digital technologies allow, using theories commonly accepted to support own ideas.
- 3 Analyse the observed lesson and the discussion with your mentor, exploring how the key activities using digital technologies support teaching and learning.

Evidence of reflection (400 words)

- 1 Evaluate your findings from Unit 1, exploring the key features that make digital technologies effective for teaching and learning that you can apply to your practice.
- 2 Evaluate the impact your new learning and experiences from Unit 1 will have on your practice and how this will help you to prepare for Unit 2.

Unit 2 Teaching a lesson with digital technologies

Candidates will explore the practice of teaching lessons with digital technologies, from planning and implementing new methods, to assessing learning and evaluating the effectiveness of using digital technologies. They will engage with associated concepts and principles in order to achieve the following learning outcomes.

Learning outcomes

- E:** Plan, prepare and teach a lesson that uses one or more digital technologies to promote learning.
- F:** Demonstrate how the use of digital technologies can promote active learning and an inclusive learning environment, and how it can engage and motivate learners to learn.
- G:** Use appropriate formative assessment methods to assess the effect of using digital technologies on learner's learning.
- H:** Evaluate the lesson, including the use of the digital technologies, using feedback from their mentor and their own reflections to develop future practice.

Learning outcomes and key questions

Learning outcome E: Plan, prepare and teach a lesson that uses one or more digital technologies to promote learning.

- What are the key aspects to consider when designing a lesson that uses digital technologies to promote learning?
- How do learning objectives in a lesson that uses digital technologies differ from those in lessons that do not use digital technologies?
- Does the lesson have clear learning objectives relating specifically to the use of digital technologies to promote learning?
- Have you selected any new or innovative activities using digital technologies that you have recently explored?
- Is it clear in the lesson plan which digital technologies are used for teaching and which are used for learning?

Learning outcome F: Demonstrate how the use of digital technologies can promote active learning and an inclusive learning environment, and how it can engage and motivate learners to learn.

- How can digital technologies help to make the learning environment inclusive for all learners?
- Are the digital technologies in your lesson allowing room for differentiation?
- How do digital technologies help promote active learning in this particular lesson?
- How can the use of digital technologies help motivate learners?
- What evidence do you have of technology increasing the level of engagement and motivation?

Learning outcome G: Use appropriate formative assessment methods to assess the effect of using digital technologies on learner's learning.

- What formative assessment methods are suitable for assessing the effect of using digital technologies on learners' learning?
 - Does the lesson plan include strategies to assess whether learning has taken place?
 - How can you judge the effects of using a particular technology on your learners' learning?
 - How are you going to provide feedback to learners on their progress?
 - What steps will you take if learners are not achieving the learning objectives?
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Learning outcome H: Evaluate the lesson, including the use of the digital technologies, using feedback from their mentor and their own reflections to develop future practice.

- How can you evaluate the effectiveness of the digital technologies in promoting learning?
 - How have you evaluated the effectiveness of the digital technologies used in the lesson on teaching and learning?
 - What feedback have you obtained from your mentor and learners that is helpful in developing your practice?
 - What will you do as a result of the feedback gained?
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The role of the mentor in Unit 2

The mentor will lead a discussion before the taught lesson and then observe the candidate delivering the lesson. During the post-observation discussion, the mentor will give feedback to the candidate on the observed lesson and help the candidate to reflect on how effective the lesson was in supporting the learners in meeting the stated outcomes. The mentor will help the candidate identify key strengths and areas for improvement in their teaching practice.

Assessment

Candidates will:

- plan, prepare, teach and evaluate a lesson
- arrange for the lesson to be observed by their mentor to provide formative feedback for reflective practice.

In the portfolio, candidates must submit the following.

Evidence of practice – This includes:

- *Module 1: Unit 2 Lesson Plan Form*
- *Module 1: Unit 2 Observer Feedback Form*
- samples of learner work from the lesson, clearly showing how digital technologies promoted learning.

Evidence of learning (600 words)

- 1 Explain how you selected and used digital technologies in your lesson, using concepts and principles to justify your choices.
- 2 Explain how you planned for your lesson to be engaging, motivating and inclusive.
- 3 Explore how this lesson using digital technologies differs from lessons that do not use digital technologies.

Evidence of reflection (600 words)

- 1 Evaluate the effectiveness of the lesson, highlighting the digital technologies that helped to engage and motivate learners to learn.
- 2 Evaluate the impact your new learning and experiences from Unit 2 have had on your practice and how this will help you to prepare for Unit 3.

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

Candidates will build on their learning from Unit 2 to develop a deeper understanding of the concepts and principles of teaching with digital technologies they engaged with so that they can achieve the following learning outcomes.

Learning outcomes

- I:** Select appropriate digital technologies to design learning activities specific to developing different skills.
- J:** Use feedback from colleagues and learners to identify strengths and areas for further development when designing learning activities using digital technologies.
- K:** Create opportunities to collaborate with colleagues to design learning activities using digital technologies.
- L:** Apply relevant concepts, principles and theories in reflecting on the benefits and challenges of using digital technologies for teaching and learning.

Learning outcomes and key questions

Learning outcome I: Select appropriate digital technologies to design learning activities specific to developing different skills.

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- What are the advantages, disadvantages, and effectiveness of using a particular digital technology in supporting teaching and learning?
 - Are the two learning activities chosen starters, main activities or plenary activities?
 - How did you choose which digital technologies to use for each learning activity?
 - Is the purpose of using specific digital tools for each learning activity clear?
 - Do the chosen digital technologies allow learners to achieve the learning objectives?
-

Learning outcome J: Use feedback from colleagues and learners to identify strengths and areas for further development when designing learning activities using digital technologies.

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- How are you going to gain feedback from colleagues and learners?
 - How will you use the feedback you obtained to identify strengths and areas for further development in your practice?
 - What areas of your practice using digital technologies can be improved or applied differently in future?
 - How will you consider factors such as online safeguarding, social and individual wellbeing, and online class management when planning future developments?
 - What will you do as a result of the feedback gained and how will the analysis inform future developments in your practice?
-

Learning outcome K: Create opportunities to collaborate with colleagues to design learning activities using digital technologies.

- What are the benefits and challenges of working with colleagues when designing teaching and learning activities using digital technologies?
 - How will you continue to work with colleagues when designing teaching and learning activities using digital technologies?
 - Why do you think that working with colleagues from other schools to design learning opportunities using digital technologies will benefit your learners?
 - How are you developing the Cambridge learner and teacher attributes in your professional practice?
-

Learning outcome L: Apply relevant concepts, principles and theories in reflecting on the benefits and challenges of using digital technologies for teaching and learning.

- How important do you think it is to relate your practice of using digital technologies for teaching and learning to concepts, principles and theories?
 - As well as more generic learning theories, what theories related to using digital technologies have informed your practice throughout the Certificate, and why?
 - What evidence have you given that supports concepts, principles and theories related to using digital technologies to support teaching and learning?
 - What benefits and challenges have you identified whilst using digital technologies?
 - Why and how are you now going to make digital technologies an integral part of your own practice?
-

The role of the mentor in Unit 3

The mentor will support the candidate in selecting two different teaching and learning activities to focus on. The mentor will hold a discussion with the candidate to support their reflection and evaluation of their use of digital technologies.

Assessment

Candidates will:

- select and analyse two different teaching and learning activities using digital technologies specific to developing different skills. At least one of these activities must be new for Unit 3.
- gather and analyse feedback on teaching these activities from a variety of sources.
- present evidence of sharing with colleagues their experiences of teaching with digital technologies.

In the portfolio, candidates must submit the following.

Evidence of practice – This includes:

- *Module 1: Unit 3 Teaching and Learning Activity Log Form*
- *Module 1: Unit 3 Teaching and Learning Activity: Observer Feedback Form*
- *Module 1: Unit 3 Collaboration with colleagues Form.*

Evidence of learning (400 words)

- 1 Explain the design of your two different learning activities and the benefits and challenges of using digital technologies in these two instances.
- 2 Analyse how the challenges may be addressed and how the benefits can be developed.

Evidence of reflection (800 words)

- 1 Evaluate the impact that the feedback from colleagues and learners has had on your practice.
- 2 Evaluate your thinking and practice in using digital technologies, how it has developed during the programme and how it might develop further, using concepts and principles to support your ideas.

Assessment criteria

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

- 1 Understanding teaching and learning with digital technologies.
- 2 Developing thinking and practice in teaching with digital technologies.
- 3 Analysis and discussion.
- 4 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.

5 Support and resources for PDQ programmes

We provide a wide range of practical resources, detailed guidance and innovative support so that Programme Leaders can give their candidates the best possible preparation for Cambridge PDQs.

Support and resources

Programme planning and delivery

Syllabus

The Cambridge International Professional Development Qualification (PDQ) syllabus

Syllabus Support Guides

Exemplify the Learning Outcome and Assessment Criteria requirements for each PDQ syllabus

PDQ Programme Leader Community

An online community for Programme Leaders to share and collaborate

Portfolio creation and development

Sample Evidence

Examples of completed evidence with a commentary from the Principal Examiner

Getting started with...

Interactive resources which introduce and develop key areas of teaching and learning practice

Principal Examiner Reports

Annual reports completed by the Principal Examiner for each syllabus

Webinars

Recorded sessions looking at different aspects of the PDQ Assessment requirements

Training

PDQ Programme Leader Course

Training provided by Cambridge for aspiring PDQ Programme Leaders

Online Training

Introductory, Extension, Enrichment and Assessment courses, available online here:

www.cambridgeinternational.org/support-and-training-for-schools/professional-development

Support for Mentors

www.cambridgeinternational.org/Images/304230-a-guide-for-mentors.pdf

'Getting started with mentoring' is also available as an online enrichment course:

www.cambridgeinternational.org/support-and-training-for-schools/professional-development/enrichment-courses/online-enrichment

Continuing professional development

Education briefs

www.cambridgeinternational.org/support-and-training-for-schools/teaching-cambridge-at-your-school/education-briefs

Further study towards PGCE, MA or MBA

www.cambridgeinternational.org/support-and-training-for-schools/professional-development/professional-development-qualifications/teacher-development-journey

Note: Cambridge has secured this route into Higher Education study for all those that hold a PDQ Diploma. Cambridge Programme Leaders cannot claim credits towards this themselves, unless they also hold a PDQ Diploma, but the journey may still be of interest to them.

What is PDQ Connect?

PDQ Connect is the platform used by Cambridge International to support the delivery of PDQ Programmes, and where Programme Leaders can find resources, templates and forms. Use of the platform allows Programme Leaders to support candidates to collate, develop and enhance their portfolio evidence prior to final submission.

Final submission of the completed PDQ portfolio of evidence to Cambridge International must be made using the correct PDQ templates (*Forms*) as specified in each syllabus, and in accordance with the current submission guidance and series deadlines as laid out in the *Administrative Guide*. The *Administrative Guide* is for exams officers who are making the final submission of the portfolio to Cambridge for grading.

Cambridge International is committed to ensuring that all assessments are ‘fair, have sound ethical underpinning, and operate according to the highest technical standards’ (The Cambridge Approach 2009). Cambridge International expects technology to be used to enhance the assessment process in terms of reliability, validity, accessibility as well as efficiency, and not to dilute its quality (Craven 2009).

- **Validity:** Assessment should measure what it claims to measure and what it is important to measure; there must be a close fit between the assessment methods and the learning outcomes.
- **Authenticity:** All assessment practices must have processes in place to ensure that the evidence for assessment is the learner’s work.
- **Reliability and consistency:** Assessment should be capable of generating sufficient evidence for the target level.

6 Glossary

The following definitions apply throughout this syllabus.

Word or phrase	What it means
Achievement	measures the improvement in a learner's performance over a period of time as the result of a process of learning; this is reflected in their grades
Acquisition model of learning	learning is seen mainly as acquiring knowledge and skills through direct instruction
Active learning	based on the theory of constructivism where learners participate in a variety of activities that promote engagement with learning resources, ideas and other people; it then requires them to think hard in order to make sense of their new learning by linking it to their existing learning
Advance organisers	strategies that connect new learning to existing learning
Aim	a broad statement of intent indicating what the teacher must teach and the learners must learn during a process of learning
Analysis	process of studying or examining something carefully and in detail to learn more about it
Assessment	any activity in which evidence of learning is collected in a planned and systematic way and then used to make a judgement about what learners know, understand and are able to do
Assessment criteria	freestanding statements that specify the standard required to achieve a learning outcome or objective.
Assessment for learning	based on the concept of teachers embedding the strategies of questioning, formative feedback, peer and self-assessment, and the formative use of summative assessments in their classroom practice; assessment information is then used by teachers to adjust their teaching strategies and by learners to adjust their learning strategies
Assessment of learning	an alternative term for summative assessment
Asynchronous learning	Asynchronous learning allows learners to train individually, enabling them to complete courses at a time, place and pace that suits them.
Attainment	the level or standard reached by a learner at the end of a learning sequence or learning programme that is evidenced by test or examination results
Behaviourism	theory of learning based on the concept that all behaviours are learned through interaction with the environment to the near exclusion of innate or inherited factors

Word or phrase	What it means
Blended learning	A style of education in which learners learn via electronic and online media as well as traditional face-to-face teaching. Blended learning is the combination of traditional, face-to-face learning methods with technology-based online learning methods. It has also been described as a blending of live training and self-paced training.
Candidate	the person following a Cambridge Professional Development syllabus
Cognition	process of acquiring knowledge and understanding through thought, experience, and the senses
Cognitivism	theory of learning based on the concept of how learners acquire new learning through perception, thinking, remembering, reasoning and judging
Collaboration	working with one or more colleagues for a particular purpose or to achieve a common goal
Competence	ability to repeatedly do something well
Constructivism	theory of learning based on the concept that all learners ‘construct’ their own unique meanings or understanding of experiences by reflecting or thinking about them
Cooperation	working together to accomplish shared goals
Critique	a detailed analysis and judgement, both positive and negative, of a person’s work or ideas
Criterion-referencing	describe the qualities of what a learner knows, understands and is able to do without reference to the performance of others
Critical evaluation	making judgements through a process of critical thinking and analysis
Critical thinking	careful goal-directed thinking; it is a way of thinking about any subject, content or problem by analysing the facts to form a judgement
Curriculum	academic content taught in a school or in a specific course or learning programme; it is usually presented as syllabuses for sequential stages of learners’ learning
Dialogic teaching	involves on-going talk between the teacher and learners; it provides learners with opportunities to contribute to classroom dialogue in extended and varied ways so they can explore the limits of their own understanding through the use of language
Didactic teaching	learning is seen as mainly acquiring knowledge and skills as the direct result of teaching
Differentiated learning	strategies used to accommodate the differences between learners so they all have the best possible chance of progressing their learning
Evaluate	to judge or determine the quality, importance or value of something
Experiential learning	process that involves learners engaging with a variety of experiences and then through reflection, creating links with existing learning to form new learning

Word or phrase	What it means
Explore	think about an idea or topic in order to assess it carefully
Formative assessment	assessment methods used by teachers to check the learners' understanding of the topic being taught at different stages of a lesson
Gamification	the application of typical elements of game playing (e.g. point scoring, competition with others, rules of play) to other areas of activity such as teaching and learning activities
Higher-order thinking skills	requires learners to use their analytical, evaluative and creative thinking skills in a range of activities to progress their learning
Humanism	theory of learning based on the concept that the development of the whole person is considered more important than the development of specific subject matter
Inclusive learning	the learners' entitlement to a learning experience that respects diversity, enables participation, removes barriers and anticipates and considers a variety of learning needs and preferences
Key questions	indicate the professional learning related to a learning outcome
LCMS (Learning Content Management System)	once distinguished from the term learning management system (LMS) the two are now mostly interchangeable, like an LMS, an LCMS manages the creation, storage and delivery of eLearning content
Learner	we use 'learner' in a general, aspirational sense
Learning objective	brief description of what the learners must know or be able to do as a result of their learning experiences
Learning outcome	brief description of what the learners must know or be able to do as a result of their learning experiences at the end of a course, learning programme, module or unit; it specifically relates to the learning that will be assessed
Lower-order thinking skills	requires learners to use their skills of remembering, understanding and applying their learning in a range of activities
Mentor	an experienced colleague who provides support, advice and guidance to help develop the personal and professional growth of a less experienced colleague
Metacognition	concept that requires learners to reflect or think about how they learn and then intentionally apply the outcomes of their reflective thinking to improve future learning
Motivation	a learner's willingness to participate in the learning process
Norm-referencing	comparing one learner's performance with that of everyone else being assessed
Participation model of learning	creating personal meaning by reflecting on shared experiences and then applying it in different situations
Pedagogy	the study and theory of the methods and principles of teaching

Word or phrase	What it means
Practitioner inquiry	a collaborative four-stage cycle of planning, teaching, reviewing and reflecting designed to improve an aspect of a teacher's classroom practice and ultimately their learners' learning and achievement
Reflection in action	reflecting during an experience, it can also be thought of as 'thinking on our feet' and involves making decisions or changes to practice during the experience as the situation demands
Reflection on action	reflecting after the experience, can also be thought of as making decisions or changes to practice as a result of retrospective thinking
Reflective account	an account of an event or a process that is not simply descriptive; it addresses evaluative questions as well as how and why questions
Reflective journal	a document in digital or traditional book format can be used to record experiences; it is subsequently used to critically reflect on learning or practice in order to improve future learning or teaching practice
Reflective practice	learning through and from experience towards gaining new insights into self and practice
Reflective thinking	consciously thinking about analysing what you are doing, what you have previously done, what you have experienced, what and how you have learned
Reliability	how well a test consistently measures what it is supposed to measure; reliability exists if repeat marking of a single assessment by a second or third examiner produces the same outcome, or if the learner achieves the same outcome when taking a second version of the same test.
SAMR model	The SAMR Model is a framework created by Dr Ruben Puentedura that categorizes four different degrees of classroom technology integration. The letters 'SAMR' stand for Substitution, Augmentation, Modification, and Redefinition
Scaffolding of learning	providing one or more learners with support from the teacher and/or peers when learning new concepts; the support is reduced as the learners become more independent in their thinking and ability to acquire new knowledge and skills
Scheme of learning	also known as a programme plan or scheme of work; an interpretation of a syllabus into a sequence of lessons
Self regulation	describes how learners monitor and control their cognitive processes
Social constructivism	theory of learning that stresses the fundamental role of social interaction in the development of cognition
Special education needs	refers to learners who experience learning difficulties that make it harder for them to learn than most children and young people of the same age
Spiral of learning	learning is structured so that concepts and ideas are initially taught at a simplified level and then re-visited at more complex levels later on

Word or phrase	What it means
Success criteria	summarise the key steps needed for learners to successfully meet a learning intention by specifying the main things to do, include or focus on
Summative assessment	assessment methods used to evidence what the learners have learned at a given point in time, usually at the end of a course, module, unit, theme or topic
Synchronous learning	Synchronous learning is instructor-led learning in a virtual classroom setting. Learners log on at the same time and an instructor guides the class
Teacher	this is used to refer to anyone holding the position of teacher; it could be the candidate's colleagues or used in a general sense
Tutorial	a short class conducted by a teacher for one learner or a small number of learners, usually focused on personal target-setting and reflection on the learners' own learning
Validity	how well a test measures what it is supposed to measure
Zone of Proximal Development	a learner's ability to perform learning tasks just beyond their current abilities with guidance and support from the teacher and/or peers

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