We will fail ... to improve schooling for children until we acknowledge the importance of schools not only as places for teachers to work but also as places for teachers to learn

Throughout this guide we have emphasised the importance of teacher professional development. This chapter suggests principles schools need to think about as they plan their professional development activities. The focus should be on improving learning outcomes. Therefore, important sources of information about priorities for professional development will come from the key areas covered in previous chapters: the school development plan, improving student learning through assessment practices and evaluating teachers. Schools should pay particular attention to coaching and mentoring teachers. They should also take a systematic approach to evaluating their efforts to support continuous professional learning. Finally, this chapter emphasises the need to establish and foster communities of practice in schools and how Cambridge Professional Development Qualifications can help this to happen.

7.1 Planning and evaluating professional development

We cannot overstate how important teacher professional development is to school improvement. In a review of the impact of different school leadership practices on learner outcomes reported in the introduction (Robinson 2007), leaders promoting and participating in teacher learning and development had the greatest impact on student learning.

Timperley (2008) synthesised the research on teacher professional learning and development that has been shown to have a positive impact on valued student outcomes. Her advice for schools planning for teachers' professional learning includes:

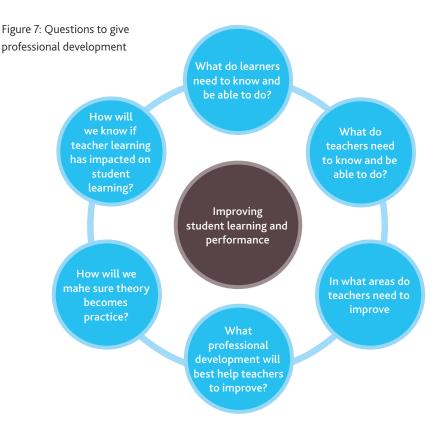
- The focus should be on improving valued learner outcomes. Start with students' learning needs. "Teachers need to be able to answer the question what knowledge and skills do we as teachers need to help students bridge the gap between current understandings and valued student outcomes?"
- There need to be repeated and sustained opportunities to embed any new learning in an environment of trust and challenge.

- New learning needs to take account of existing practice and prevailing ideas about teaching and learning.
- Leaders should create an environment that supports professional learning.
- Leaders should promote professional learning.

The importance of linking teacher evaluation to professional development was mentioned in Chapter 6. It is very likely that patterns will emerge from teacher evaluations suggesting priorities for professional development. The school development planning process will also identify areas for teacher development which may relate to the whole school or to specific disciplines or year groups. As Figure 7 illustrates, the sequence starts with identifying needs, considering how practice can be improved, applying new practices and then evaluating their impact. Too often important parts of this process are missed out, in particular assessing the impact of changes on student learning, which will then provide input into the next cycle of development.

Teachers and schools are inundated with ideas about how to improve teaching and learning. Some are appropriate, some are not. Too often professional development activities in schools are superficial because too much is attempted – decisions are made

based on the interest an individual has with a new practice rather than on the needs of students. Once you have decided the priorities you must fully engage with them and identify appropriate principles and practices for improving pedagogy. Embedding new practices takes time and effort, and this is another reason why persistent effort and evaluation need to be part of the process. External input, either from outside the school or from experienced colleagues in other parts of the school, can be very helpful. Schools should look internally to their own resources, supporting teachers through coaching and mentoring. The most effective professional development focuses on improving learning rather than changing teaching practice (see Weston 2013).



Professional development refers to a wide range of activities that are intended to improve teacher practice. These include:

- mentoring and coaching
- encouraging teachers to work collaboratively to conduct lesson studies and/or research into the impact of any new teaching strategies they have implemented
- developing team teaching
- developing teaching and learning communities
- encouraging groups of teachers to engage with, and learn from, other successful schools – locally, nationally and internationally
- attending Cambridge training courses
- encouraging teachers to become trainers themselves
- encouraging teachers to become examiners
- encouraging teachers and leaders to take Cambridge Professional Development **Qualifications.**

Professional development needs will depend on the situation. Teachers new to the profession, or to teaching Cambridge qualifications, will need support from experienced colleagues and to attend appropriate Cambridge training events. Experienced Cambridge teachers will want to improve their practice by leading the development of others (being mentors), involving themselves in professional learning communities, or becoming Cambridge trainers or examiners. They might also want to complete Professional Development Qualifications provided by Cambridge International or others. Some schools do not use their own experienced staff enough to lead the learning for others in the school, relying too much on external training.

Whatever professional learning you engage in to meet your needs, it is important to monitor progress and evaluate to check that it is doing what you need it to do. One framework schools can use to do this (and to answer the question: How will we know if teacher learning has impacted on student learning?) is provided by Guskey (2000). This framework provides five critical stages or levels of evaluation that are arranged hierarchically and move from the simple to more complex. The table below lists these stages. It also shows the key research questions and methodologies schools can use to make the impact of their professional development programmes more visible to their community.

Note that with each succeeding level, the process of gathering evaluation information is likely to require increased time and resources. As Guskey (2000, p. 78) states, "each higher level builds on the ones before [such that] success at one level is necessary for success at the levels that follow".

Table 12: Adapted from Five Critical Levels of Professional Development Evaluation (Guskey 2000)

Evaluation level	What questions are addressed?	How will information be gathered?	What is measured or assessed?	How will information be used?
1. Participants' reactions	 Did they like it? Was their time well spent? Did the material make sense? Will it be useful? Was the leader knowledgeable and helpful? Was the environment right and fit for purpose? 	Questionnaires administered at the end of the session.	Initial satisfaction with the experience.	To improve programme design and delivery.
2. Participants' learning	Did participants acquire the intended knowledge, conceptual understandings and skills?	 Questionnaires Simulations Demonstrations Participant reflections (oral and/or written) Professional portfolios of evidence. 	New knowledge, understanding and skills of participants.	To improve programme content, format and organisation.
3. Organisation support and change	 Was implementation advocated, facilitated and supported? Was the support public and overt? Were problems addressed quickly and efficiently? Were sufficient resources made available? Were successes recognised and shared? What was the impact on the organisation? Did it affect the organisation's culture and procedures? 	 School records Minutes from follow-up meetings Questionnaires Structured interviews with participants and school leadership Professional portfolios of evidence. 	The organisation's advocacy, support, accommodation, facilitation and recognition.	To document and improve organisation support. To inform future change efforts.

continued

Evaluation level	What questions are addressed?	How will information be gathered?	What is measured or assessed?	How will information be used?
4. Participants' use of new knowledge and skills	 Did participants effectively apply the new knowledge and skills? Did classroom practice change as a result? 	 Questionnaires Structured interviews with participants and their mentors Participant reflections (oral and/or written) Professional portfolios of evidence Direct observations Video or audio tapes. 	Degree and quality of implementation.	To document and improve the implementation of programme content.
5. Student outcomes	 What was the impact on students? Did it affect student performance or achievement? Did it influence students' physical or emotional well-being? Are students more confident as learners? Is student attendance improving? Are dropouts decreasing? Have levels of literacy and numeracy improved? 	 Student records (formative and summative) School records Questionnaires Structured interviews with students, parents, teachers, and/or leadership Professional portfolios of evidence. 	 Student learning outcomes: Cognitive (performance and achievement) Metacognitive or self-regulated learning Affective (attitudes and dispositions) Psychomotor (skills and behaviours). 	To focus and improve all aspects of programme design, implementation and follow-up. To demonstrate the overall impact of professional development.

The key purpose of professional development is made clear – to change classroom practice and thereby improve student outcomes. If schools are serious about the investments they make in this area, then a systematic approach to evaluation is key – to both understand the effectiveness of teacher professional development and determine future expenditure. Adopting the framework provided by Guskey will go some way in helping schools with this process.

7.2 Mentoring and coaching teachers

Introducing and implementing a high-quality programme of mentoring and coaching is one effective way of promoting good practice within the school to improve teachers' skills and performance. The terms 'mentoring' and 'coaching' are sometimes used as if they are the same. While they do have many aspects in common, each has specific attributes and specific uses. Schools need to consider the potential impact of each and carefully plan how to introduce and implement them.

A national framework for coaching and mentoring in England developed by the Centre for the Use of Research and Evidence in Education (CUREE) in 2005 distinguished between mentoring, specialist coaching and co-coaching (peer coaching):

Mentoring is a structured, sustained process for supporting professional learners through significant career transitions.

- **Specialist coaching** is a structured, sustained process for developing a specific aspect of a professional learner's practice.
- Collaborative (co-) coaching is a structured, sustained process between two or more professional learners to help them embed new knowledge and skills from specialist sources in day-to-day practice.

Mentoring

Mentoring is a supportive, long-term relationship between an experienced teacher (mentor) and a less experienced teacher (mentee). A mentoring programme is often used as part of the induction process. It supports teachers who are newly qualified and/or new to the school, or those newly appointed to management or other 'new' positions. The relationship is characterised by the fact that the mentor has greater experience and more advanced skills than the mentee. The mentor seeks to alter and improve the teacher's behaviour, values and pedagogy. The process may form part of the teacher performance review process.

The role of the mentor:

- Provide support for the teacher, professionally and emotionally.
- Demonstrate effective teaching skills and strategies.
- Lead learning conversations that support, scaffold and challenge the teacher to improve their pedagogy.
- Support and guide the teacher's lesson planning, observe and assess the lesson, provide feedback against agreed criteria.
- Set targets for improvement with the teacher.
- Advise and help to negotiate the teacher's next steps for professional development.

Professional mentoring is a highly skilled role for which mentors need to be well prepared. In most cases, they will need professional development themselves to learn and develop the necessary skills. Mentoring itself will also provide opportunities for development, especially as the mentor will learn from the relationship with the mentee.

A professional mentor needs to have the following skills and attributes:

A reflective practitioner with a clear understanding of what constitutes outstanding teaching and learning.

- Respected as an effective practitioner by other teachers and learners.
- A skilled, active listener and someone who asks the mentee open, rather than closed, questions.
- Effective at modelling and describing potential teaching strategies.
- Open to sharing and discussing pedagogy.
- Skilled and experienced at classroom observation and providing sensitive and developmental feedback.
- Prepared to commit time and resources to the mentoring relationship.

Coaching

According to Creasy and Paterson (2005, p. 10) "Whilst it takes many different forms, coaching is principally a joint enterprise in which one person supports another to develop their understanding and practice in an area defined by their own needs and interests. ... Coaching often involves integrating new or alternative approaches into the professional's existing repertoire of skills and strategies."

The coaching relationship is characterised by the fact that it is non-hierarchical and involves peer-to-peer discussion and collaborative working. Teachers choose their coaches and what area of their practice they want to work on. Coaching is a partnership, with the coach playing the role of 'critical friend'. They give objective feedback on the teacher's strengths and areas for development so they can evaluate their own performance. The coach may lead the discussions at times, but the teacher should be in control. In discussion with the coach, the teacher analyses and evaluates their practice, sets targets, identifies next steps for development, and decides what support or training they might need and where to find it.

The role of the coach involves:

- building a supportive, collaborative working relationship. This may include joint lesson planning, delivery and evaluation
- facilitating discussions and encouraging the teacher to take the lead
- not being judgemental
- normally being an equal, rather than a superior, to the teacher in the school's hierarchical structure

- focusing on the areas agreed with the teacher. For example, if the teacher has planned to use new strategies to differentiate by content, the coach may agree to gather data on individual learners. This will assess how well they are making sense of the content and reacting to the task. After the lesson, the coach and the teacher consider the lesson using the information gathered and evaluate the impact of the new strategies. (You could set up a video camera to record the lesson for deconstructing. This has the advantage of allowing the teacher and coach to observe the lesson together. Also, if the camera is set up on a tripod the coach does not necessarily need to be present in the lesson)
- giving feedback objectively, focusing on the agreed areas for observation
- supporting teachers to take ownership of their own professional development plan and set their own targets
- being chosen in agreement with the teacher.

Coaches require many of the same qualities and skills as mentors. The coach needs to have good listening skills and ask open and searching questions to help discussion. The relationship needs to be one of mutual respect and, like mentoring, coaching requires training and practice for it to be effective.

7.3 Establishing communities of practice through Cambridge **Professional Development Qualifications**

Throughout this guide we have emphasised the need to develop the teaching faculty of the school. This investment needs to be sustained over a long period of time. The main objective should be to improve classroom practice and student outcomes. Many successful schools achieve this by developing professional learning communities, or communities of practice among their teachers. These are gatherings of two or more teachers who share a common goal or interest, and which are characterised in the education context by (adapted from Lee and Spillane 2008):

- open classrooms teacher classroom practice made available for peer observation and critique
- open dialogue between colleagues, deeply reflecting on their practice
- a focus on student learning

- a high degree of collaboration in terms of, for example, curriculum and assessment planning, moderating and standardising the marking of student work, etc.
- sharing constructive norms and values.

Cambridge International supports schools in developing communities of practice through its suite of Professional Development Qualifications. Otherwise known as PDOs, these qualifications have been designed to be integrated, over a sustained period of time, into a school's professional development planning, activities and culture. They help teachers and leaders to:

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

Professional learning draws on the candidate's own teaching and learning environment, making the qualifications immediately applicable and relevant. Crucially, Cambridge PDQs aim to help schools improve through cost-effective, sustainable programmes. They benefit teachers as well as their learners, and demonstrate to parents, carers and the school community that the school values and nurtures its teaching staff.

The suite of Cambridge qualifications covers four themed areas:

- Teaching and Learning
- **Teaching Bilingual Learners**
- Teaching with Digital Technologies
- Educational Leadership

All qualifications are available at both Certificate and Diploma level, with the Certificate providing a strong foundation for the Diploma. The Cambridge PDQs are accredited by University College London Institute of Education, offering successful candidates a clear pathway to further professional development. The courses are for international education professionals at all stages of their careers.

Becoming a Cambridge Professional Development Centre

Deciding to offer the qualifications is an important step in the school's development process. In doing so, the school is making a clear statement that continuous professional development is a key part of its overall improvement planning and that it wants to meet the needs of its teachers and learners.

All organisations wishing to offer Cambridge PDQs must be approved by Cambridge International. This process allows us to learn more about the school's values and approach to education, and ensure that it meets the appropriate quality standards. Once approved, the school will join a select network of organisations all working to improve their professional development strategy.

You can find more information in the following publications on our website at: www.cambridgeinternational.org/pdq:

- Cambridge Professional Development Qualifications a quide for Cambridge school leaders www.cambridgeinternational.org/images/170403-cambridge-professional-development-qualifications-brochure.pdf
- Becoming a Cambridge Professional Development Centre a quide to the approval process www.cambridgeinternational.org/images/171348-becoming-a-cambridge-professional-development-centre.pdf

8: Working with us

This chapter highlights the range of support services and resources we offer to schools working with us. This includes our Professional Development Qualifications, which were outlined in the previous chapter. It will give you an overview of the different types of support available and where you can find detailed information.

To help your teaching team understand and effectively deliver our programmes, and to meet their professional development needs, we offer a range of support materials and services. Teachers can access this support if your whole-school curriculum is built on Cambridge courses, or if you combine Cambridge courses with other national or international qualifications.

We can provide three major areas of support:

- curriculum materials and resources to support teachers in delivering subject curricula
- professional development
- local advisory and development services.

School Support Hub

An online resource bank and community forum where teachers can access thousands of Cambridge support resources, exchange lesson ideas and materials, and join subjectspecific discussion forums.

Assessment tools

We provide dedicated online support to schools registered to offer Cambridge Primary and Cambridge Lower Secondary. Teachers can download progression tests and use results analysis tools to monitor learners' progress.

For teachers and students of Cambridge Global Perspectives

Cambridge schools offering Cambridge Global Perspectives can use our online learning area. It provides a space for teachers and learners to build online communities where they can share resources and work with other schools. In addition, there are interactive Cambridge IGCSE and Cambridge International AS Level Global Perspectives courses available in the online learning area.

Teaching resources

Syllabus (or curriculum framework)

The most important documents teachers will use. They describe what learners need to know, what they must be able to do, and how they will be assessed. We provide curriculum frameworks for Cambridge Primary and Lower Secondary subjects and syllabuses for Cambridge Upper Secondary and Cambridge Advanced subjects.

Schemes of work

Medium-term plans that give ideas on how teachers might deliver the courses.

Teacher guides

Some subjects have teacher guides which provide extra guidance on planning and teaching.

Textbooks and publisher resources

We publish lists of resources to support teaching, including textbooks and websites. Some of these resources are endorsed by us. This means we have quality checked them and judge them to match the syllabus content well.

8: Working with us continued

Example candidate responses (Standards Booklets)

Real candidate answers are shown alongside examiner comments so teachers can see the level of performance needed to achieve each grade.

Exam preparation materials

Past question papers

We publish past papers for each subject. These are useful for giving learners practice at answering different types of question.

Examiner reports

Our principal examiners write detailed reports describing learners' overall performance on each part of the question. The reports give insight into common misconceptions shown by learners, which teachers can address in lessons.

Grade thresholds

These show the minimum number of marks learners needed to achieve in order to be awarded a particular grade.

Mark schemes

These help teachers understand how marks are awarded for each question and what examiners look for when they mark.

For more information go to www.cambridgeinternational.org/teachers

Local support

We can provide local support and guidance for teachers and school leaders involved in implementing the Cambridge curriculum. By working with you we will be able to respond to your specific needs by providing a more personalised experience. We can also help identify solutions or processes to address any problems or challenges you may experience. If you need longer-term support we can work with you to develop and implement a more formalised programme. This could include expert consultancy around activities introduced in this guide, including whole-school evaluation, school development planning and teacher evaluation.

If you are interested in local support please contact us at info@cambridgeinternational.org with 'Local curriculum support request' in the email subject line.

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