

New Deal for the Education Workforce



Llywodraeth Cymru
Welsh Government

Effective collaboration

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Leading, learning, inspiring

Audience

Educational practitioners working with learners from ages 3 to 19, including teachers, support staff, leaders and further education lecturers.

Overview

This booklet defines and outlines the key features of effective collaboration. It explores a variety of different types of effective collaboration and describes how the approaches can improve learner outcomes and contribute to whole-school improvement. It also provides examples and case studies of the practical implementation of effective collaboration and supports practitioners to assess their own abilities in and identify the next steps in developing their own skills in this area.

Action required

None – for information only.

Further information

Enquires about this document should be directed to:

Teaching and Learning Improvement Branch
Practitioner Standards and Professional Development Division
Department for Education and Skills
Welsh Government
Cathays Park
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Additional copies

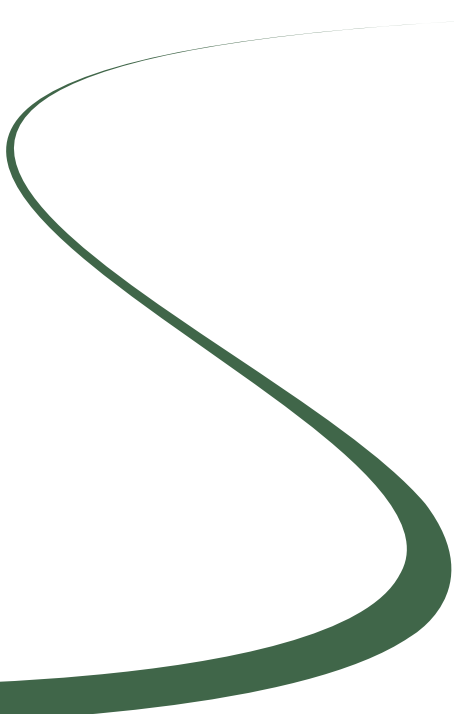
This document can be accessed on the Welsh Government's Learning Wales website at gov.wales/learning

Related documents

Coaching and mentoring (Welsh Government, 2015), *Reflective practice* (Welsh Government, 2015), *Effective use of data and research evidence* (Welsh Government, 2015)

Contents

1. Introduction	2
2. Why collaborate?	3
Benefits of collaboration for practitioners and organisations	3
Benefits of collaboration for learners	5
3. What does effective collaboration involve?	8
Circles of collaboration	8
Examples of collaborative activities	8
Professional learning communities (PLCs)	11
Collaboration between organisations within a region	15
Collaborating beyond your region	17
4. How can collaboration help me?	18
5. Summary	20
6. Where can I find out more?	21
References	21
Further reading	22



1. Introduction

This booklet forms part of a set of resources to support the Welsh Government's 'New Deal' for the education workforce, and its professional learning model (PLM) for educational practitioners in Wales. This key Welsh Government initiative emphasises the need for practitioners to learn and develop throughout their careers so that they can do the very best for their learners. It is linked to other education improvement developments by the Welsh Government including *Qualified for life* and school development plans. You can find out more about these developments in the reference list in Section 6 of this booklet (see page 21).

This resource focuses on effective collaboration, a key component of the PLM, as indicated in Figure 1. It will provide you with information about working collaboratively from a variety of sources, along with practical advice and guidance on what you can do to get the best out of working with colleagues within your organisation and beyond.

Figure 1: Diagram summarising the key components of the PLM



All the studies, reports, and other evidence mentioned in this booklet are listed in Section 6 (see page 21) so that you can read more about them if you wish. You can also explore PLM topics further within the module on professional learning on the Learning Wales website.

2. Why collaborate?

Benefits of collaboration for practitioners and organisations

Research indicates that a collective approach to learning and teaching has beneficial effects on both individuals and organisations. A recent McKinsey & Co. report states that:

Collaborative practice is the method by which a school system 'hardwires' the values and beliefs implicit in its system into a form manifest in day-to-day teaching practice. (McKinsey & Co., 2010)

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In other words, an organisation does not automatically adopt good ideas, beliefs, and practice: these need to be spread by means of colleagues communicating and sharing.

This view of the importance of colleagues working together is shared by Professor Michael Fullan who believes that collaboration is a key higher-order skill for the twenty-first century, and is closely allied to the skill of communication (Fullan, 2011). He goes on to comment on studies that show that collaboration not only develops educator competence, but also develops commitment and accountability.

Effective collaboration ensures that important competencies are not restricted to a limited number of practitioners, but are distributed as widely as possible. This sharing of expertise increases the 'social capital' (or 'peer power') of an organisation, and this acts as a reservoir of best practice. When new individuals join an organisation with a collaborative culture, they slowly become part of the social capital of that organisation as they learn from others. In such an organisation, professional learning does not depend solely on individual initiative, and practitioners are less likely to feel unsupported or isolated. Conversely, when individuals leave such an organisation, for example at retirement, key expertise is not lost. This is a particularly valued feature of some

educational systems, for example in Japan, to ensure that the legacy of outstanding teachers is not lost but passed on to colleagues (McKinsey & Co., 2007). You will read a case study about a collaborative professional learning activity from Japan in Section 3 ('Examples of collaborative activities').

Point for reflection

What expertise or experience do you have that you could pass on to others?

In Case study 1, you will read about a way in which collaboration is utilised in Austria to raise school standards.

Case study 1: the role of the 'Lerndesigner' in Austrian schools

An example of a communal approach within schools in Austria involves the role of 'Lerndesigner'. The Lerndesigner is a teacher-leader who undertakes specific training to assist senior managers in the task of increasing social capital, and hence raising standards. A key aspect of this role is to organise networking events, and other forms of peer learning, and Lerndesigners also facilitate the sharing of ideas and of best practice in an online way.

Source: OECD (2014) *Improving Schools in Wales: an OECD Perspective*.

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Working with others helps individuals to learn, whether they are children or adults, and this includes educational practitioners (Black and Wiliam, 2001). This link between collaboration and learning might remind you of 'social constructivism', a concept which you may recall from your initial training. Theorists such as Vygotsky and Brunner maintained that we construct our knowledge from our ideas and experiences, including interactions with the

people around us. You can find out more about this from the social constructivism section of the Berkley Teaching and Resource Center (see: <http://gsi.berkeley.edu/gsi-guide-contents/learning-theory-research/social-constructivism>).

Not only does collaborative working help you learn, but it should make your job more enjoyable, and this was a finding from a 2009 survey of 1,000 teachers in the US. The respondents who participated in, and valued, collaborative activities were more likely to be satisfied with their jobs than those who were not involved in collaboration (Perkins-Gough, 2010).

Point for reflection

To what extent have collaborative activities helped your role to date?

Benefits of collaboration for learners

Perhaps the most compelling aspect of working in a collaborative way is its potential to improve teaching and raise the achievement of learners. An example of evidence for this is provided in Case study 2.

Case study 2: The impact of the Lead and Emerging Practitioner School Pathfinder Project in Wales

The Lead and Emerging Practitioner School Pathfinder Project in Wales involves school-to-school collaboration, and this project is discussed in more detail in a further case study in Section 3.

The National Foundation for Educational Research (NFER) was commissioned by the Welsh Government to provide an interim assessment of the project, and the resulting report can be found on the Learning Wales website at learning.wales.gov.uk/docs/learningwales/publications/140728-nfer-evaluation-pathfinder-project-en.pdf.

The report states that though it may be too early to ascertain the full impact of the project, teacher observations to date have indicated benefits of the project interventions to learners, and the table in Figure 2 summarises some of these.

Figure 2: Some learner impacts from the Lead and Emerging Practitioner School Pathfinder Project

Primary schools
Raised learners' expectations of achievement.
Increased learner engagement.
Higher motivation.
Secondary schools
Learners having better understanding of what they could achieve.
Improved attitudes to, and confidence about, exams.
Better mentoring of the learners in 'the hidden middle'.

Point for reflection

What evidence do you have of your collaborative activities impacting on your learners?

There are many other examples of collaborative practice improving learner outcomes. In Ontario, for example, a collaborative initiative resulted in an improvement in literacy and numeracy which led to an increase in high school graduation rate from 68 per cent to 81 per cent over a period of six years (Fullan, 2011).

Another example from England relates to collaboration between local authorities and further education (FE). A NFER-commissioned study of nine localities showed where collaboration had occurred there was greater progression and engagement of young people in education and training, and a reduction in the 'not in employment, education or training' (NEET) (McCrone et al., 2009).

In Case study 3, you can read about an example of collaboration in Wales leading to better outcomes for learners.

Case study 3: Ysgol Dyffryn Ogwen, Gwynedd

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The introduction of collaborative observation of lessons at Ysgol Dyffryn Ogwen, a secondary school in North Wales, has increased communication and dialogue between teachers and helped to spread best practice. As a result, Estyn have judged that learners' understanding of subjects has developed, along with their thinking skills and literacy. Learners also participate in activities which are often exciting and

stimulating. This has helped to ensure that working relationships between teachers and learners are very good.

You can read more about this case study on the Estyn website at:

www.estyn.gov.uk/english/docViewer/285694.5/teachers-talking-to-teachers-leads-to-improvement/?navmap=33,53,159

The observations of Estyn noted in the case study above tie in with research carried out in the US by Professor Carrie Leana et al., (Leana, 2010). Professor Leana investigated collaboration between teachers in schools in New York City (at ages/grades approximating to primary schools in the UK), and also looked at learner outcomes. She noted that:

. . . teacher social capital was a significant predictor of student achievement gains above and beyond teacher experience or ability in the classroom. And the effects of teacher social capital on student performance were powerful. If a teacher's social capital was just one standard deviation higher than the average, her students' math scores increased by 5.7 per cent.

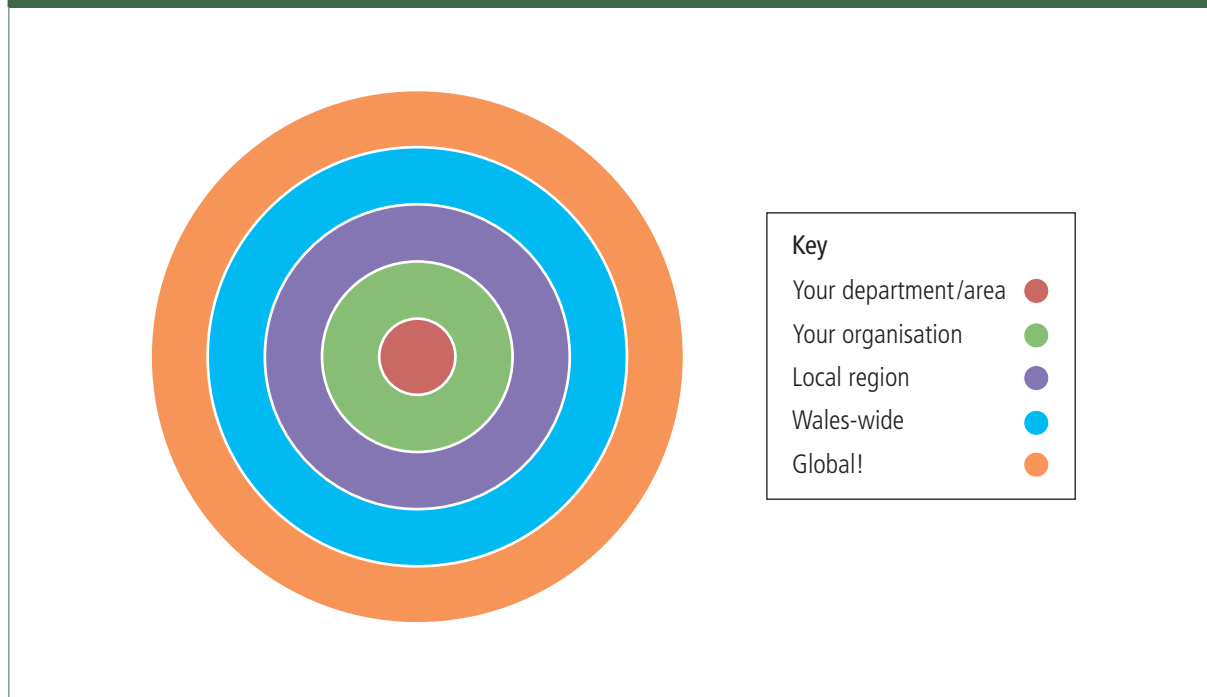
Don't forget that learners can also be involved in collaborative activity, and carefully planned group-work can be a good way of raising engagement and learning (Black and Wiliam, 2001).

3. What does effective collaboration involve?

Circles of collaboration

Effective collaboration can take many forms, and is not restricted to your organisation or immediate locality. Figure 3 shows that there are many possible 'circles' of collaboration that radiate beyond your department and organisation, and reach into your community, region, and beyond. You will explore ways in which collaboration can reach across regions in 'Professional learning communities (PLCs)' and 'Collaboration between organisations within a region' in this section, but first you will focus on collaborative activities that can make a positive impact on classroom practice.

Figure 3: Circles of collaborative contact



Produced by Dr Christine Davies, University of Wales Trinity St David, based on West-Burnham, 2014.

Examples of collaborative activities

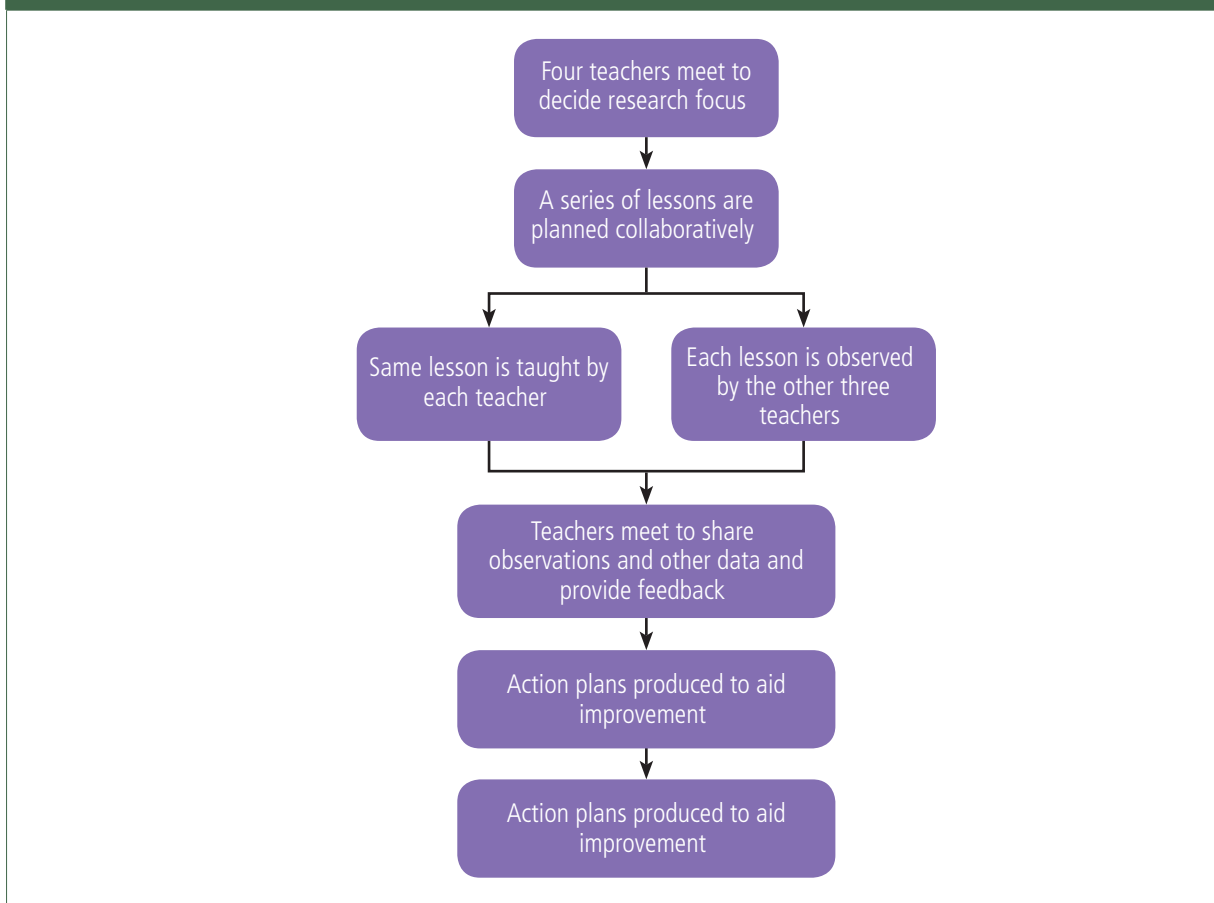
What sort of collaborative activities can promote professional learning and the dissemination of best practice? A 2015 report by the Inter-Agency Network for Education in Emergencies (INEE) made the following suggestions for collaborative activities that could benefit practitioners in any sector or part of the world (INEE, 2015).

- Assign teachers to work together in pairs (or other groupings) so they can plan and co-teach together.
- Assign 'homework' for each teacher to research on a specific topic (through books, radio, television or speaking with community members or education staff) and come back as a group to teach each other.
- Hold open lessons/classrooms in or across schools.

Case study 4: 'Lesson study' in Japan (kenkyuu jugou)

'Lesson study' (kenkyuu jugou) is an important element of professional development in Japan. This activity involves groups of three or four practitioners planning and observing each other's lessons, based on specific research foci and goals. An example of how this works in practice is shown in the following figure.

Figure 4: Example of a lesson study plan



Produced by Dr Christine Davies, University of Wales Trinity St David, based on de Botton et al., 2012.

Lesson observation is an important professional development activity, and the previous case study above outlines one group-focused way in which it could operate. There are many other collaborative options for observation, all of which may be more effective in improving learning than less collaborative approaches (Coe et al., 2014).

A recent 'Education World' article (Education World, 2015), outlines several collective observation possibilities in addition to the 'lesson study' example in Case study 4.

Figure 5: Table to show different collaborative observation models

Observation model	Details
Peer coaching	Educators work together to discuss and share teaching practices, observe each other's classrooms, provide mutual support.
Cognitive coaching	The observed teacher is given the opportunity to process learning associated with teaching the lesson, often by asking questions.
Critical Friends Group (CFG)	A group of around 10 practitioners, under the guidance of at least one coach, who meet regularly to develop collaborative skills, reflect on their teaching practices, and assess student work.
Learning Walk	Participants observe lessons in several classrooms, look at student work and classroom artifacts, and talk with students and teachers. Participants then review what they have learned.

Based on Education World, 2015.

Points for reflection

- What sort of observational activities have you experienced?
- Have any had a collaborative component?

Professional learning communities (PLCs)

You probably liaise with colleagues within your area or subject on a daily basis, and similarly, you may have regular contact with your line manager and/or mentor. But do you interact with others beyond this close 'circle of intimacy'? There is significant value in sharing best practice with peers across subjects and/or areas of your organisation. This can be particularly useful for 'generic' issues such as lesson planning, behaviour management, reflective practice and assessment for learning.

This type of collective approach to sharing best practice and solving problems is the basis of a 'community of practice' within an organisation. The membership of such a 'community' might include practitioners from some or all parts of an organisation, and could also include colleagues from other institutions, or even parents/carers. Because this type of community can contribute so much to practitioners' development, it is often referred to as a 'professional learning community' (PLC), or alternatively as a 'teacher learning community'.

Case study 5: The impact of PLCs

In 2007, a team led by Vicki Vescio at the University of Florida (Vescio et al., 2008) examined ten studies of PLCs from the US, and one from England. They found that only a minority of these studies gathered empirical data on the impact of PLCs on teaching practice and student learning, but where such data existed they showed a strong positive connection between the role of the PLC and student achievement.

Point for reflection

Could you use your research skills to investigate links between PLC practice and learner impact?

The Welsh Government's definition of a PLC is as follows:

A PLC is a group of practitioners working together using a structured process of enquiry to focus on a specific area of their teaching to improve learner outcomes and so raise school standards.

The Welsh Government have also devised a model of PLCs which is shown in the following figure.

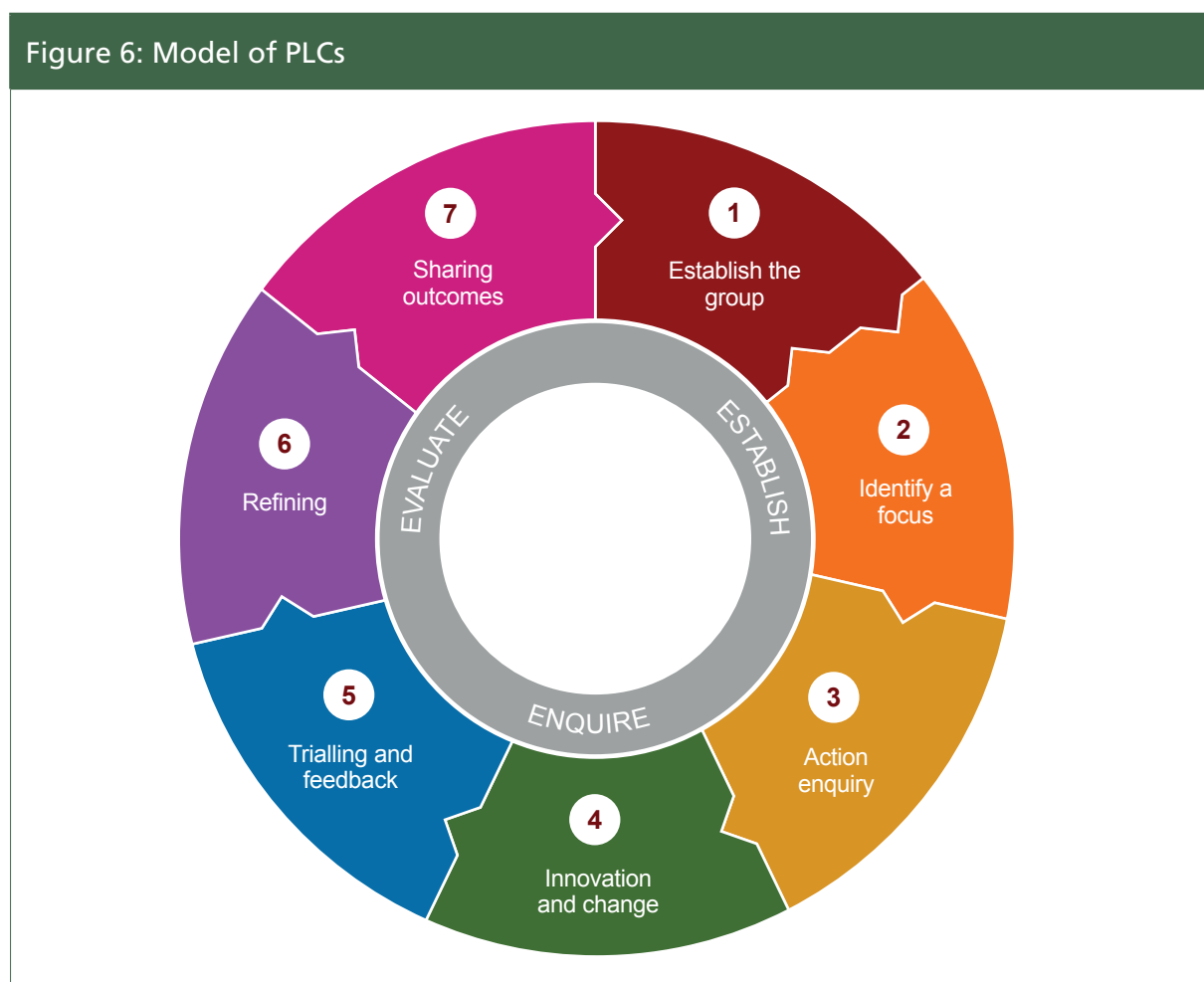


Figure 6 is taken from the section on PLCs on the Learning Wales website (learning.wales.gov.uk/yourcareer/professional-learning-communities/?lang=en) and shows some of the key stages in the functioning of an effective PLC. Note that this model is not unlike the cycle at the heart of the PLM and many other models of reflective practice (for more information please refer to the 'Professional learning' learning pack on the Learning Wales website).

The model approximately follows an ongoing pattern of planning, implementing, reviewing, and evaluating. Step 2 is important: your PLC should identify a priority to address based upon data/evidence, and you should ensure a specific focus before moving on to other issues. Step 3 highlights another key focus, i.e. action enquiry, and because this is undertaken in a collaborative way, it may be referred to as 'collaborative enquiry'. This is an active process in which practitioners collectively analyse current practice, pose questions, and investigate ways of overcoming barriers to their learners' learning.

Step 1 is, of course, even more important! Hopefully, you are aware of a PLC within your organisation or may already be part of one. However if not, why not approach your colleagues and line manager and work together to set one up?

What key points should be considered when establishing a PLC, or when actively involved in one? It is important that colleagues working together in partnership have shared goals and a shared set of values, with each individual contributing in an equitable way. The importance of maintaining good relationships within a PLC was highlighted by Professor John West-Burham (West-Burnham, 2014), and some key aspects of good working relationships are indicated in the following figure.

Figure 7: Working relationships within effective PLCs

Key aspects of working relationships within effective PLCs

- Trust
- Empathy
- Inclusion and equity
- Negotiation and compromise
- Effective listening

Point for reflection

Why is the ability to listen a valuable asset when working within a PLC, or participating in other collaborative activities?

Where the collaborative culture of an organisation is strong, both PLC and organisation may share the sort of features and values. This is not always the case, however, and as West-Burham noted (West-Burnham, 2014), there may be differences between the cultures of an organisation and a PLC within it. Some of these are depicted in the following figure.

Figure 8: Contrasting characteristics of organisations and effective communities of practice

Organisation	Community
Competition	Collaboration
Hierarchy	Network
Top down power	Shared authority
Low trust/control	High trust/consent
Focus on career	Focus on personal growth
Efficiency/outcomes	Enhanced value
Rule bound	Value driven

Based on West-Burnham, 2014.

For a PLC to be effective, it should strive to adhere to the sort of ‘community’ features indicated in Figure 8. Mutual trust and an enthusiasm to collaborate are important to ensure that members of a PLC remain highly motivated and active in addressing key learner issues. Leaders of organisations should understand this, and their support is a highly important factor for PLC success (Fullan, 2011), as is the provision of appropriate time and space for collaborative activities (INEE, 2015).

When establishing a PLC, and before deciding on the first main focus (Step 2 in the model of PLCs) it’s also important to discuss and decide on:

- agreed working practices for the PLC
- who will take on the role of the facilitator in your first meeting
- procedures for subsequent meetings
- how data could be used to identify priorities
- how you will measure the progress and impact of your PLC.

You can access detailed information about PLCs in Wales from the Learning Wales website including practitioner case studies (learning.wales.gov.uk/docs/learningwales/publications/130830-plc-guidance-en.pdf).

Collaboration between organisations within a region

It can be very helpful to look beyond your own organisation, and to extend your own community of practice into other schools or colleges in your region, and PLCs may often work in this way. Online communication provides further collaborative options, and these are discussed in detail in this section.

Another model of regional working utilises partnership between similar schools or other educational organisations within a region. An example of this is outlined in Case study 6.

Case study 6: Features of effective partnership working

In this case study we return to the Lead and Emerging Practitioner School Pathfinder Project which we looked at in Section 2.

The aim of this Welsh Government funded project is to raise standards within primary and secondary schools in Wales. The project involves partnership between specific Lead Practitioner Schools – high-performing primary and secondary schools – and Emerging Practitioner Schools which may have a mixed record. The National Foundation for Educational Research (NFER) were commissioned by the Welsh Government to provide an interim assessment of the project; the resulting report can be found on the Learning Wales website at <http://learning.wales.gov.uk/docs/learningwales/publications/140728-nfer-evaluation-pathfinder-project-en.pdf>.

The report noted key characteristics of the effective organisational partnerships involved, and some of these are shown in Figure 9.

Figure 9: Features of effective partnership and peer group working



Produced by Dr. Christine Davies, University of Wales Trinity St David, based on report by Welsh Government, 2014.

Point for reflection

Why is it important to recognise the challenges that institutions and practitioners face?

Models for school-to-school support and PLCs have links to school development plans (SDP) and the national model for regional working (www.wales.gov.uk/topics/educationandskills/publications/guidance/national-model-for-regional-working/?lang=en). Regional consortia have a key role to play in regional working, and are involved in the organisation of school clusters and federations, and 'school-to-school improvement activity'.

The four current education consortia for schools in Wales are:

- GwE (School Effectiveness and Improvement Service for North Wales): Anglesey to Flintshire
- ERW (Education through Regional Working): Ceredigion to Neath Port Talbot
- Central South Consortium: Bridgend to Cardiff
- EAS (Education Achievement Service for South East Wales): Caerphilly to Newport.

Points for reflection

- If you work within a school, which consortium covers your area?
- If you work within further education (FE), or other branches of educational provision, what regional services are available to you for networking or other social aspects of professional learning?

Collaborating beyond your region

Even if you are part of an active PLC within your own institution and/or region, it's also worthwhile to discuss, exchange ideas, and plan new initiatives with colleagues across Wales and beyond. This may happen at meetings relating to curriculum or syllabus changes, or events catering for specific aspects of professional development. There are also opportunities available to work with practitioners from other institutions across Wales in a less formal way, e.g. by means of 'TeachMeets'. These are generally held in schools, colleges, or other educational institutions, often in the early evening, and usually provide scope for both face-to-face and virtual meeting to ensure that location should not be an impediment to involvement. 'HwbMeets' are a variant on this theme, and another online opportunity to collaborate with colleagues provided via the Hwb community area (hwb.wales.gov.uk/pages/Community-Index).



There are also many online communities and networks of practitioners across the world that you could join as an individual and/or as part of your institution. Examples include the 'Expansive Education Network' (eedNET) (www.expansiveeducation.net/aboutus), and the 'National Teacher Enquiry Network' (NTEN) (<http://tdtrust.org/nten/home>). Both offer membership for schools and practitioners, and also provides resources and development opportunities. You may also find that 'MESH'

is an useful conduit for collaboration and communication, and you may find the 'MESHguide' on online communities of practice (www.meshguides.org/tool-6-using-online-communities-of-practice) an useful reference point.

4. How can collaboration help me?

In this section, you will undertake an activity that provides you with an opportunity to reflect on the extent to which you work collectively at present, and what you could do over the next six months to ensure that you are an even more important part of the 'social capital' of your organisation.

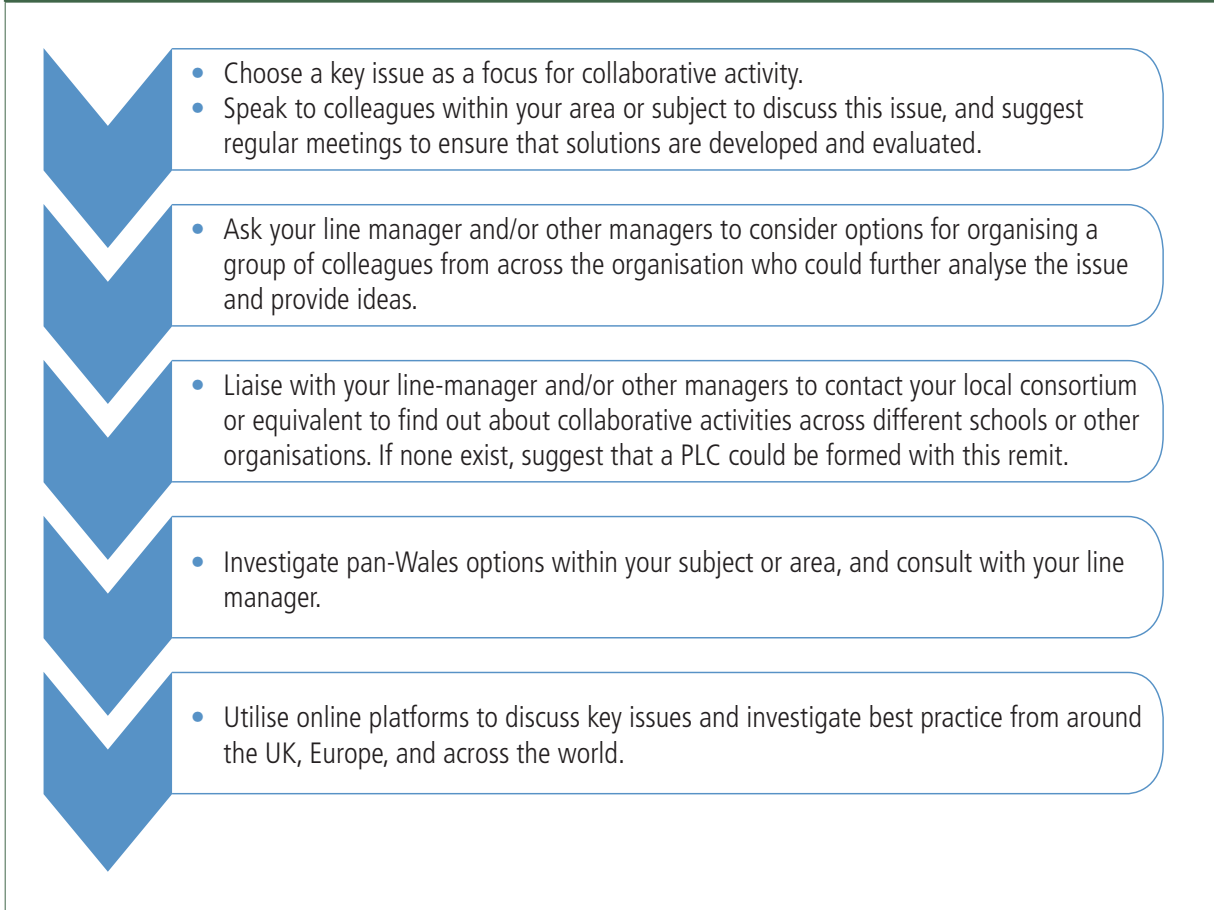
Complete the middle column of the table now (you may prefer to photocopy the page first) indicating with a tick or cross whether you are involved in each of the aspects of collaborative practice listed. In six months' time, repeat the process in the far right-hand column to evaluate what you have achieved during that period.

Figure 10: Checklist on collaborative practice

Aspect of collaborative practice	Now (date:)	6 months' time (date:)
Regular meetings within your department or area?		
Involvement in a PLC or other cross-curricular group?		
Involvement in a group activity to address a particular issue (e.g. assessment)?		
Interaction with colleagues in other organisations to discuss/share best practice?		
Involvement in pan-Wales activity (e.g. via TeachMeet)?		
Use of online tools to facilitate collaboration (e.g. Hwb+)?		

If you have put a cross in any of the above boxes, you should consider what you could do next to increase the degree to which you work together with colleagues. Some options you could pursue are listed in following figure.

Figure 11: Actions to increase collaboration



Produced by Dr. Christine Davies, University of Wales Trinity St David.

It's important to bear in mind that collaborative practice is not just about learning, but about sharing expertise, and when considering ways in which you can work collaboratively, you should reflect on the expertise and experience that you can provide as well as the ideas and skills that you could gain.

5. Summary

- Effective collaboration can be of great benefit to organisations, practitioners, and learners.
- There are many good examples of collaborative activities that can address a range of learning and teaching issues.
- PLCs provide a means for working collectively within an organisation and beyond.
- Colleagues in other educational organisations in your region and across Wales may be valuable sources of support, and online modes of communication can facilitate collaborative practice across regions and countries.

6. Where can I find out more?

References

- Berkley Graduate Division (2015) Graduate Student Instructor Teaching & Resource Centre: *Social Constructivism*. [online] Available at: <http://gsi.berkeley.edu/gsi-guide-contents/learning-theory-research/social-constructivism>
- Black and Wiliam (2001) *Inside the Black Box*. [online] Available at: <http://weaeducation.typepad.co.uk/files/blackbox-1.pdf> [Accessed 12.10.14]
- De Botton, O., Hare, S., and Humphreys, A. (2012) *School2School: How to make Teaching Schools a success*. CfBT Education Trust report. [online] Available at: www.cfbt.com/en-GB/Research/Research-library/2012/r-school-2-school-2012
- Education World (2015) *Teachers Observing Teachers: A Professional Development Tool for Every School*. [online] Available at: www.educationworld.com/a_admin/admin/admin297.shtml#sthash.H9gOShtA.dpuf [Accessed 6.1.15]
- eedNET (2014) *What is the Expansive Education Network?* [online] Available at: www.expansiveeducation.net/aboutus [Accessed 21.10.14]
- Fullan, M. (2011) *Choosing the wrong drivers for whole system reform*. Centre for Strategic Education Seminar Series Paper No. 204. [online] Available at: <http://edsources.org/wp-content/uploads/Fullan-Wrong-Drivers1.pdf>
- Leana, C. R. (2011), 'The missing link in school reform', *Stanford Social Innovation Review*. [online]. Available at: www.ssireview.org/articles/entry/the_missing_link_in_school_reform [Accessed 2.11.14]
- OECD (2014) *Improving Schools in Wales: an OECD Perspective*. [online] Available at: www.oecd.org/edu/Improving-schools-in-Wales.pdf [Accessed 23.9.14]
- Perkins-Gough, D. (2010) ASDC: Special Report/MetLife Survey: *Collaboration Improves Job Satisfaction*. [online] Available at: www.ascd.org/publications/educational-leadership/summer10/vol67/num09/MetLife-Survey@-Collaboration-Improves-Job-Satisfaction.aspx [Accessed 12.1.15]
- Vescio, V., Ross, D. and Adams, A. (2008) A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education* 24, pp.80–91
- Welsh Government (2014) *Learning Wales: Lead and Emerging Practitioner Schools: Midpoint evaluation of Tranche 1*. [online] Available at: <http://learning.wales.gov.uk/resources/browse-all/practitioner-schools-evaluation-tranche-1/?lang=en> [Accessed 12.10.14]

- Welsh Government (2013) Learning Wales: *Professional learning communities*. [online] Available at: <http://learning.wales.gov.uk/yourcareer/professional-learningcommunities/?lang=en> [Accessed 12.10.14]
- West-Burnham (2014) *Making collaboration work: from the structural to the relational*. [online] Available at: <http://cdn.cfbt.com/~media/cfbtcorporate/files/resources/inspiring-leadership-2014/seminar-southern-educational-leadership-trust-making-collaboration-work.pdf> [Accessed 6.1.15]

Further reading

- Harris, A. and Jones, M. (2011) *Professional Learning Communities in Action*. Leanta.
- Mullen, C. (2009) *The handbook of leadership and professional learning communities*. New York: Palgrave Macmillan.
- Street, H. and Temperley, J. (eds) (2005) *Improving Schools through Collaborative Enquiry*. Continuum.
- Wiliam, D. (2006) Assessment: Learning Communities Can Use It to Engineer a Bridge. Connecting Teaching. *Journal of Staff Development*, 27 (10), pp.16–20.