

Are you carrying out *research* and hoping that the results will be used by teachers and policy makers?

Are you involved in contributing to the *design and development* of CPD that builds on your research?

Or are you engaged in *primary research* in the field of CPD?

If you are, then you will be interested in the major changes to the CPD landscape in the last 10 years, which have significant (and exciting) potential implications for the research community.

The focus on pupils' learning for teachers' professional development, and the growing demand for high-quality CPD from schools, both present opportunities.

This summary presents the cumulative evidence from four systematic reviews of research about effective CPD. It highlights some key challenges in building an authoritative and practical evidence base to underpin the curriculum and the pedagogy of supporting adult professional learning in education.

### THE EVIDENCE AT A GLANCE

The summary sets out to:

- give a clear picture of the findings of the four systematic EPPI<sup>1</sup> reviews concerning what constitutes effective CPD
- present the evidence about the importance of the contribution of the public evidence base to CPD (and the potential role of researchers in supporting professional learning), and
- suggest ways in which researchers could increase the influence of their work – for example by doing further work on effective CPD and reporting findings in ways that are accessible to CPD practitioners and providers.

### What were the main findings?

The four reviews looked for evidence about effective continuing professional development (CPD) that was linked to positive outcomes for teachers and for their pupils. These positive outcomes included:

- teachers had greater commitment, self-esteem and confidence in making a difference to pupils' learning
- teachers had more positive beliefs about, and attitudes towards, their pupils' learning
- teachers increased their repertoires of strategies and their abilities to match teaching to pupils' different needs
- there was an improvement in teachers' knowledge and understanding of pedagogy
- they were more committed to CPD, and
- there were improvements in pupils' learning, motivation and outcomes relevant to the CPD, including for example improvements in engagement with classroom activities.

The reviews also found evidence that links CPD with both teachers' learning and pupils' outcomes. The findings point to important and useful ways in which this research and evidence could be developed.

<sup>1</sup> Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI Centre)

## THE EVIDENCE UNPACKED

### What kind of CPD was more likely to achieve positive teaching and learning outcomes?

The most effective CPD, which was clearly linked to the strongest or widest ranging positive effects for teachers and pupils, was found to be collaborative. That is, the facilitators and designers of the CPD planned to involve two or more teachers working together on a sustained basis to experiment with new practice, as a specific learning strategy. By contrast, there was evidence in the reviews that CPD involving teachers working on their own was associated with a narrower range of changes and weaker, shorter-term benefits.

All of the CPD for which there was evidence of positive impact – however strong or weak – also involved specialist expertise, closely linked to school-based activity. This came in various forms, including the use of university research partners and other experts. In some cases the specialists were drawn from other schools or specifically developed within the same school, as a preparatory stage for taking CPD to scale. CPD that made a difference to practice was also found to be sustained, involving peer collaboration and specialist inputs over at least one term and usually two or more terms.

### What factors in CPD are linked to positive benefits for teachers?

The key messages from the four reviews have been consistent and cumulative. CPD that was linked to the positive benefits described above usually involved the following:

- **peer support** (in pairs or small groups) to encourage, extend and structure professional learning, dialogue and experimentation – *in combination with*
- **specialist support**, including modelling, workshops, observation, feedback, coaching – a menu of research-based strategies for enhancing learning
- **planned meetings** for structured discussion – including exploring evidence from the teachers' classrooms about their experiments with new approaches and of their beliefs about teaching, their subjects and their learners
- **processes for sustaining the CPD** over time to enable teachers to embed the practices in their own classroom settings – including informal day-to-day discussions and observations between teachers, and using work they would have to do anyway (such as lesson planning and designing schemes of work or curriculum development) as a springboard for learning in workshops
- **recognition and analysis of teachers' individual starting points** and building on what they know and can do already
- **developing teachers' ownership** of their learning by offering scope to identify or refine their own learning focus

(within a menu set by the programme or the school), and the opportunity to take on a degree of leadership in their CPD, and

- **a focus on pupil learning and pupil outcomes**, often as a way to analyse starting points, structure development discussions and evaluate progress, both formatively and summatively.

## WHAT DO SOME OF THESE KEY CHARACTERISTICS LOOK LIKE IN A BIT MORE DETAIL? AND WHAT MIGHT BE THE IMPLICATIONS OF FOR YOUR WORK?

### What was the significance of peer support?

The programmes in the review studies identified three broad, usually overlapping, approaches to enabling and developing effective peer support:

- Teachers were encouraged, or even required, to complete a task in groups, run school support groups together and work in pairs to watch each other experiment with new approaches.
- Almost always, peer support was used to keep the learning moving forward between seminars. In the one or two individually-oriented studies that provided high enough quality evidence to be included, any peer support was mostly concentrated in workshop and seminar sessions. Work to maintain the momentum of the learning took the form of frequent (and therefore costly) follow-up support by specialists.
- Sustained peer support generally took the form of peer observation and evidence-based discussions between teachers about how well their new approaches were working and which students responded in which ways.

The main function of peer support was to encourage and extend activities that build on the instruction provided by specialists. Since, as was frequently noted, teachers who were learning reciprocally in pairs or small groups didn't want to let each other down, risk-taking and experimenting in classrooms felt safer. The importance of peer support in effective CPD was underlined by the conclusion from one study, which found negative evidence for some teachers – that it was specifically the absence of peer collaboration in the design which was a critical factor in the programme failing to achieve its aims.

*Specialists frequently provided a menu of research-based strategies for teachers to choose from. How might your own research connect with and contribute to CPD? Are CPD providers in your institution well informed about your research? Are you able to identify strategies they might include in CPD 'menus'?*

## What does effective specialist support involve?

It was also *in combination with specialist support* that peer support was found to be a key component in encouraging, extending and structuring professional learning. In the review studies, specialist inputs were usually provided by external specialists, often from higher education institutions or local authorities. In a few cases they came from other schools, or were trained by external specialists as internal specialists in the first phase of the programme. A note of caution here: since there were no comparisons between internal and external specialists, the importance of using external expertise is not clear. However the evidence about specialist input often emphasised the importance of bringing in extensive knowledge of practice in other settings. Expertise of this kind was provided by various kinds of specialists, who not only contributed new knowledge and skill but helped the teachers use a range of support processes to embed the learning and change their practice.

There were examples of peer collaboration being supported by a university faculty for a full academic year<sup>2</sup>, and in one of the studies this kind of collaboration continued over two years<sup>3</sup>. The pattern of integrating specialist and peer inputs varied, and was tailored to specific contexts and working arrangements. But in essence, specialist inputs were always used more intensely near the start, and were regularly followed up by classroom visits, where the researchers observed and discussed teachers' implementation of new teaching strategies. Regular workshops allowed groups of teachers to work together to identify their next steps. Specialists also continued to consult with the teachers about the new strategies over the course of the programmes, while teachers observed each other and discussed the implications of their observations on pupils' learning in between the sessions with the specialists.

The reviews identified three main areas of specialist support to initiate and embed change:

- specialist knowledge of a particular subject area or effective pedagogical approaches
- specialist knowledge and skills in framing, initiating and sustaining the CPD process, and
- an understanding of the dynamics, challenges and facilitators of professional learning in practical ways in the context of day-to-day school life.

*How might your research take the rhythms and patterns of the school context into account so that the scheduling of interventions encourage peer collaboration? Many of the specialists brought a sophisticated range of skills to bear on the CPD intervention, including close attention to teachers' learning. How might researchers share their understanding of adult learning with teachers so that this learning can be sustained beyond the research intervention itself?*

The CPD programmes described in the review were resource-intensive in terms of the time the specialists spent arranging and facilitating the programmes, although none of the studies gave the financial costs of the programmes. This may be partly because they were part of a broader research programme. However, this information is important for professionals who are looking to replicate or adapt approaches to CPD, so they have a clearer idea of their value for money.

*In what ways can researchers provide information on the resources required for a particular programme, so that the costs are clear for any one approach? Is it feasible to separate the costs of providing the CPD from the overall research budget in intervention programmes?*

## What was the role of specialists in sustaining CPD through structured discussions?

The reviews found that a key factor in sustaining the effects of professional development was the presence of planned meetings for structured discussions. Examples of this included:

- specialists providing ideas (including those from research) to explore teachers' tacit knowledge and beliefs about teaching and learning
- encouraging teachers to engage in collaborative problem solving, and
- providing an environment in which teachers felt safe to talk about their experiences of trying out new approaches in their classroom.

By establishing collaborative groupings, specialists also helped teachers develop skills in professional interaction and support. In some cases, this attention to learning conversations could be quite specific. In one study, for example<sup>4</sup>, the specialist used peer coaching sessions to encourage teachers to think carefully about the way they gave feedback to each other, and how this helped or inhibited them in wanting to change their practice.

The CPD interventions in the reviews shared many common characteristics but did not always share the same language. Specialist support, for example, was variously referred to as mentoring, coaching, conferencing, tutoring, supervising or facilitating enquiry-based learning. Peer support was variously labelled as collaborative enquiry, peer support, peer coaching, peer learning or peer conferencing. Although the combination of specialist and peer 'coaching' takes time and resources, especially when building initial skills, the reviews found it was an effective strategy for CPD, which was usually self-sustaining. The most effective approaches included a mixture of specialist coaching and support and peer coaching in pairs or small groups. The reviews reported

<sup>2</sup> Zetlin (1998)

<sup>4</sup> Fine and Kossack (2002)

<sup>3</sup> Brown (1992)

that this process helped teachers to build confidence, become more reflective about their practice and develop a strong sense of ownership and accountability to each other.

*CPD policy now requires teachers to learn collaboratively in systematic ways, including mentoring and coaching, and there is evidence that teachers welcome these opportunities for structured and planned discussion about their professional development<sup>5</sup>. Could there be value in research which looks at the relationship between the relatively high upfront costs of some collaborative initiatives in relation to their longer-term value in sustaining and embedding change?*

### Processes for sustaining CPD to embed the learning in classroom settings

Evidence suggests assumptions that the initial stage of professional learning should take place outside the classroom are outdated. The second review found that a mix of in classroom and beyond school experiences is more effective than wholly external ones. In most cases the specialist provided external expertise, but also knew how to draw on and develop the expertise of the teachers themselves, building the momentum of, and capacity for, professional development in participating schools. They drew on teachers' knowledge of their students and local circumstances, and frequently encouraged them to lead workshop sessions. In some cases they put the teachers in the driving seat for selecting new practices<sup>6</sup> or encouraged them to develop their own materials and activities based on pedagogical principles<sup>7</sup>.

*How might CPD research draw on teachers' expertise in ways that encourage and build the momentum of, and capacity for, professional development within and between schools? How can CPD research compare the relative benefits of internal and external specialists?*

### The significance of recognising teachers' starting points and ownership

All of the researchers took care to identify teachers' starting points, to track their progress. But many CPD programmes included an explicit analysis of teachers' own starting points as part of the CPD. This was one function of the peer support, but it was also a key feature of specialist contributions. These involved baseline observations and activities such as a mix of self- and peer assessment against modelled practice, specific assessment instruments, and observation and feedback from specialists. For example, it was found that when teachers

were asked about barriers they thought would prevent them implementing their learning, it significantly improved their chances of overcoming these barriers. One study<sup>8</sup> traced explicit connections between teachers' specific personal and professional needs and ensuring that teachers internalised what was learnt. As a result the CPD was able to shift their beliefs and their teaching.

Some specialists used a number of techniques, including interviewing practitioners about their subject knowledge and their students<sup>9</sup>, and observing them early on in the programme to get a sense of what areas of practice they needed to focus on<sup>10</sup>.

*The research instruments used to identify baselines against which progress could be made useful to the CPD process. Could researchers share research tools and instruments for evaluating impact on beliefs, behaviours or outcomes, for example, with teachers for their own use in classrooms and schools?*

### The importance of a focus on pupil learning

In addition to exploring student outcomes, many studies described how specialists helped teachers understand and develop their own practice in light of the impact it was having on pupils' learning. There is some interesting evidence in the first review that teachers' experiences of collaborative CPD – the first time many of them had worked in this way – also positively affected their own and their pupils' classroom behaviours. Hence teachers engaging with adult learning processes were able to transfer some of their own learning to the teaching strategies they used. For example, if teachers appreciated the value of discussion, they were more inclined to use discussion as a teaching strategy to better effect in their classrooms. Even where pupil outcomes were an explicit starting point for the research but not for the CPD, reviewers found evidence of teachers prioritising pupil learning in their own development – for example, by focusing on their own improving practice in relation to a small group of specific pupils.

*Many of the studies in these reviews focused on either a pedagogical intervention or on continuing professional development processes. Is there scope for researchers to focus on both?*

<sup>5</sup> Cordingley (2005)

<sup>8</sup> Farmer (2003)

<sup>6</sup> Jacobsen (2001)

<sup>9</sup> Bryant (2001)

<sup>7</sup> Cho (2002)

<sup>10</sup> Lin (2002)

## THE NATURE AND SCALE OF THE EVIDENCE, AND WHAT THIS MIGHT MEAN FOR FUTURE RESEARCH

### The EPPI process

The reviewers scanned and filtered over 20,000<sup>11</sup> research studies for best evidence about the impact of CPD on teaching and learning. This involved systematically searching for studies which addressed the aims of the review, and filtering them against a set of specified inclusion criteria<sup>12</sup>. The inclusion criteria were then systematically reapplied to 700 full studies, followed by a process of key wording over 200 studies and filtering them against a second, narrower set of inclusion criteria. The extracted data were synthesised using the evidence from the studies selected for each review (70 studies in all).

All filtering and data extraction was double blind and the analysis and synthesis was carried out within a systematic framework specified by the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI Centre) and quality assured by them. This EPPI systematic review process is designed to be explicit and transparent about the methods used, and aims to be accountable, replicable and updatable. And, importantly given its significance to policy makers and teachers, the CPD Review Group put particular emphasis on pursuing questions that are relevant and useful to teachers and policy makers, and on reporting the results in ways that are accessible to them. This summary is one of a series of three prepared specifically for different audiences and is distinctive in setting out to meet the needs of the research community.

Some academic advisers to the review were concerned that it would be difficult to unearth studies connecting CPD with outcomes for both teachers and pupils. In the event this proved not to be the case and, given the rigour of the review process, we can be confident about the research findings. But they also present a challenge to the UK research community. Much of the research came from the USA, for example. Several interesting UK-based studies could not be included because they were either too small or did not provide evidence about the impact on pupils' learning. Although the searching strategy was extensive, and explored school improvement and development literature as well as CPD literature, the filtering process was applied systematically to titles and abstracts, and we erred on the side of including studies if in doubt. But we did find that abstracts were often a poor guide to content, and may have missed useful evidence that was not mentioned at all in the abstract. Furthermore, only a few of the studies were designed to answer the review questions specifically.

The evidence was also problematic in other ways, for example:

- Studies tended to provide detail about CPD outcomes or CPD processes. Few studies provide equally detailed evidence about both.
- Research teams usually made direct or indirect contributions to the CPD. For example, baseline assessments to track the impact of the CPD inevitably had a formative effect on the teachers where this was fed back to either CPD providers or teachers. Some of the researchers also made quite explicit contributions to the CPD. Although the studies tried to take this into account in designing evaluation instruments they could not reverse its effect.
- It seemed to be difficult for researchers to focus on both the pupils and the adult learning simultaneously. For example, studies that described the nature of the teaching and learning intervention for pupils in some detail tended to omit related evidence about the detail of the CPD process, and vice versa.
- Abstracts and titles of studies frequently proved to be poor indicators of the content of articles.
- The design of the CPD in the studies tended to build on either the CPD evidence base or the evidence base related to the targeted aspect of teaching and learning – rarely both.

These factors all count.

### What might some of the implications be for your own research?

The amount of detail the studies provided on CPD processes varied greatly. For example, some studies described how specialists shared the data they collected with teachers, or provided detail on workshop activities which clarified the nature of the specialist input and peer support. However, in several studies, whether and how data was shared remained ambiguous.

*Are there important aspects of an intervention programme, and of the interaction between the research process and the intervention, which go unreported because the researcher is focusing on the content or impact of a programme? What can researchers do to ensure that appropriate information about an intervention, including their parallel roles as researchers and CPD specialists, reaches all potential audiences?*

The effectiveness of the CPD in the various studies was evaluated using an array of different methods. This made

<sup>11</sup> 22,405 in total

<sup>12</sup> The inclusion criteria were specific to each review, and are set out in each full EPPI report

it difficult to determine the relative merits of one CPD programme against another. However, publicly funded CPD programmes increasingly require evaluation of their effectiveness to make value for money judgments, and schools are all anxious to understand the return on what is often a large investment. Ofsted (2006) pointed to the lack of effective evaluation as the weakest link in the CPD chain.

*Is there scope for researchers to come together to share the relative merits of different evaluation processes as a basis for further methodological development in this area? How can the research community support teachers in developing practice and effective ways of evaluating the impact of professional development programmes in their schools?*

*Researchers studying or introducing a new practice might consider building on both the underlying curriculum or pedagogical literature and the CPD literature. This could both inform the scaffolding of professional learning and bring a greater understanding of the underpinning principles of new approaches.*

### Developing and refining your research – making it more influential

Here are visual representations of three examples of the rhythm of a CPD intervention involving the effective use of specialist input, combined with structured peer support. Take a moment to study the range of formats and rhythms involved and the patterns in handing control to the teachers, before considering the questions for action that follow them.

Some questions to consider for your own research:

1. Are you involved with designing or carrying out research that involves working with lead teachers or advanced skills teachers? What professional learning expertise and skills do you use to encourage and enable teachers with a leadership role to work independently as specialists in their school? Is there a way of capturing or exposing this expertise in the research you are carrying out or in the ways you report it?
2. How might you capture the CPD processes involved in your own research work in ways that could be communicated usefully to teachers?

Are there tools and artefacts for, say, measuring impact on pupils and teachers, that you use in your research and that you could make available to CPD providers or teachers for their own use?

3. You will have been working hard on the theory underpinning your research. Teachers who want to transform their practice in some way need to understand both why and how things work so they can gain enough control over new approaches to be able to adapt them for their own needs and contexts.

Are there case studies you could use that encapsulate and illustrate theory at work, and might this scaffold the learning for teachers from your work?

## REFERENCES AND FURTHER READING

### References used in the summary

Brown, D F, 1992, 'The development of strategic classrooms in two secondary schools'. Unpublished research report, Ministry of Education, Wellington, New Zealand.

Bryant, D, Linan-Thompson, S, Ugel, N, Hamff, A, Hougen, M, 2001, 'The effects of professional development for middle schools general and special education teachers on implementation of reading strategies in inclusive content area classes'. *Learning Disability Quarterly* 24, p251–264.

Cho, J, 2002, 'The development of an alternative in-service programme for Korean science teachers with an emphasis on science-technology-society'. *International Journal of Science Education* 24, p1021–1035.

Cordingley, P, 2005, 'Mentoring and coaching capacity building project', DfES.

Farmer, J D, Gerretson, H, Lassak, M, 2003, 'What teachers take from professional development: cases and implications'. *Journal of Mathematics Teacher Education* 6, p331–360.

Fine, J, Kossack, S, 2002, 'The effect of using rubric-embedded cognitive coaching strategies to initiate learning conversations'. *Journal of Reading Education* 27, p31–37.

Jacobsen, D, 2001, 'Building different bridges: technology integration, engaged student learning, and new approaches to professional development'. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA, April 10–14 2001.

Lin, S, 2002, 'Improving science teaching through teacher development group: A study of elementary teachers'. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA, April 7–10 2002.

McCutchen, D, Abbott, R, Green, L, Berevas, S, Cox, S, Potter, N, Quiroga, T, Gray, A, 2002, 'Beginning literacy: links among teacher knowledge, teacher practice and student learning'. *Journal of learning disabilities* 35, p69–86.

Wilkins, C, 1997, 'Effects of a resident mentor teacher on student achievement in mathematics'. Report of a study carried out with the support of the Mid-South Educational Research Foundation.

Zetlin, A, Macleod, E, Michener, D, 1998, 'Professional development of teachers of language minority students through university-school partnership'. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA, April 1998.

### Other research and scholarship drawn on for the EPPI reviews

In framing the questions and definitions for the review, a range of related research and scholarship findings were drawn on, including the following:

The research field which informed and stimulated the first three reviews, and in particular, in the UK, on evaluations of large-scale initiatives such as the National Literacy Strategy (Earl et al, 2003, Sainsbury, 1998) and CASE (Adey and Shayer, 1994) and CAME (Shayer et al, 1999) where the input of consultants and advisers was a consistent characteristic of programmes linked to positive changes in teacher behaviour and enhanced student learning.

Earl, L, Watson, L, Levin, B, 2003, 'Watching and learning 3: the final report of the external evaluation of England's National Literacy and Numeracy Strategies', DfES.

Sainsbury, M, Shagen, I, Whetton, C, Hagues, N, Minnis, M, 1998, 'Evaluation of the national literacy project – Cohort 1', 1996–1998, NFER, Slough.

Adey, P, Shayer, P, 1994, 'Really raising standards: cognitive intervention and academic achievement', Routledge, London.

Shayer, M, Johnson, D C, Adhami, M, 1999, 'Does 'CAME' Work? Report on key stage 3 results following the use of cognitive acceleration in mathematics education', CAME Project in years 7 and 8. Proceedings of the British Society for Research into learning mathematics conference, St Martin's College, Lancaster, 5 June 1999.

A large body of literature, including that around teaching as a research and evidence informed profession (Cordingley and Bell, 2002) and around teacher enquiry and its benefits for teacher learning (Elliott, 1991; Stenhouse, 1980).

Cordingley P, Bell, M, 2002, 'Literature and evidence search: teachers' use of research and evidence as they learn to improve their teaching', TTA, London.

Elliott, J, 1991, 'Action research for educational change', Open University, Milton Keynes.

Stenhouse, L, 1980, 'Curriculum research and development in action', Heineman, London.

The reflections by Desforges (1995) on the tendency of classrooms to return to the status quo – and hence the difficulties of effecting lasting change – also being influential in persuading us to focus on sustained CPD.

Desforges, C, 1995, 'How does experience affect theoretical knowledge for teaching? Learning and instruction 5', p385–400.

### Further reading

You may be interested in further sources of information. The EPPI summaries and full reviews can be found at the following web links:

- 'How does collaborative continuing professional development (CPD) for teachers of the 5–16 age range affect teaching and learning?' Available at: <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=132> [Accessed 23/8/07]
- 'The impact of collaborative continuing professional development (CPD) on classroom teaching and learning – review: how do collaborative and sustained CPD and sustained but not collaborative CPD affect teaching and learning?' Available at: <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=136> [Accessed 23/8/07]
- 'The impact of collaborative continuing professional development (CPD) on classroom teaching and learning – review: what do teacher impact data tell us about collaborative CPD?' Available at: <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=139> [Accessed 23/8/07]
- 'What do specialists do in CCPD programmes for which there is evidence of positive outcomes for pupils and teachers?' Available at: <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2275> [Accessed 01/11/07]

The research informed practice site (TRIPS) – part of the standards site – hosts a range of studies into CPD. Titles in this area include:

- Using continuing professional development to support literacy in pre-school
- Implementing mathematics reforms in lower secondary schools serving deprived areas
- The effects of continuing professional development (CPD) on teachers and teaching in chemistry
- Primary teachers' changing attitudes and cognition during a two-year science in-service programme and their effect on pupils
- How do teachers use research findings to improve their professional practice?
- The role of powerful pedagogical strategies in curriculum development

Available at:

<http://www.standards.dfes.gov.uk/research/themes/cpd/?digest=all>  
[Accessed 23/8/07]

You may also be interested in the following research of the month (RoM) summaries on the GTC website:

- Continuing professional development: what do studies of continuing professional development (CPD) tell us about the factors which help professional growth of teachers and pupil learning?
- The impact of collaborative continuing professional development (CPD) on classroom teaching and learning: what do we know about collaborative continuing professional development (CPD) and its impact on teaching and learning?
- Teachers and school-based research: why and how do teachers engage in and with research?

Available online at:

[http://www.gtce.org.uk/research/romtopics/rom\\_cpd/](http://www.gtce.org.uk/research/romtopics/rom_cpd/)  
[Accessed 23/8/07]

The Centre for the Use of Research and Evidence in Education (CUREE) website holds a range of resources for mentoring and coaching, including the national framework for mentoring and coaching, available at: <http://www.curee.co.uk/dynamic/curee48.jsp?m=59>  
[Accessed 24/08/07]