

---

---

---

# Case study: The development of a learning communities model to support the delivery of high quality physical education initial teacher training and continuing professional development

Nicky Hepworth

---

## Abstract

*This paper explores the potential of a proposed learning communities model to support high quality physical education initial teacher training and continuing professional development. A case study strategy has been implemented focused on secondary physical education within the context of a university and school initial teacher training partnership. The purpose of the study was to examine the context and delivery of mentor training for schools in an initial teacher training partnership through a learning communities perspective. It developed the notion that mentors involved with initial teacher training were engaged in continuing professional development through the nature of their role and expectation of the partnership. A grounded theory approach was adopted to utilise evidence gathered from questionnaires to the 150 PE partnership schools, participant observation and a selection of interviews. The results showed an emergence of a number of key concepts that support a successful learning communities model to develop ITT and CPD. The conclusion reflects on the possible need to reconfigure our view of partnership in ITT and the way that it is resourced and managed.*

## Background

The background to this initiative stems from an involvement in a three year Physical Education (PE) Initial Teacher Training (ITT) Project funded by the Training and Development Agency (TDA) which was developed to raise the quality of PE ITT. Ten key areas for development were identified, one of which was to develop a model of good practice for schools to 'work in partnership with their local communities in establishing learning networks to support the development of high quality initial teacher training and continuing professional development' (Shenton et al, 2005, p10)

This partnership approach to ITT is based upon a philosophy of school and community clusters in which trainee teachers, students, teachers and the wider workforce work together for the benefit of the young people within their locality. This model embraces the concept of partnership in action, which provides an integrated, progressive and continuous strategy for implementing lifelong participation in physical activity (Hepworth 1999; Shenton 1994; Shenton 1996; Hepworth and Shenton 2005; Hepworth and Shenton 2006; DFES 2007).

Since the development of sports colleges (1996); school sport partnerships (2000) and the implementation of the Physical Education and School Sport Clubs Strategy (2002) and the subsequent Physical Education and Sport Strategy for young people (2008), the concept of clusters or families of schools has become a particular way of working.



Indeed, nationally PE ITT Providers have sought to develop their programmes to enable students to gain an insight into these developments. Furthermore, the concept of partnership clusters was developed through incorporating the philosophy of professional learning communities and research literature, scholarly activity and learning resources produced by the National College for School Leadership (NCSL) (Peters 2002; Renshaw 2003; Wenger 2005).

The introduction of Partnership in Training (DFE1992; DFEE1998; Training and Development Agency 2007) has demanded that ITT provision takes place in tandem between the training provider and the school. This has presented challenges for ITT Providers in managing and quality assuring the partnership, particularly for those Higher Education Institutions which have school placements over a wide geographical area. Consequently, the PE ITT project (Shenton *et al* 2005) identified a number of key areas in need of improvement and development which forms the basis of the rationale for the development of learning communities.

The range of issues that encompass aspects of improvement and development include consistency; meeting the individual needs of the trainee; mentor training; valuing the role of the mentor (Brooks 2000, Keay 2005) and mentoring and coaching skills identified in the new professional standards for teachers (TDA 2007). Furthermore, issues related to Continuing Professional Development (CPD) (Armour 2002, 2003, Department for Education and Employment (DfEE) 2001, Keay 2005); current and future agendas of Government reforms in education including Every Child Matters (ECM) 2006; Physical Education School Sport and Club Links (PESSCL) (2003) and the extended schools agenda are also in need of further examination into how they can be addressed through a learning community context.

### **Learning Communities - the philosophy behind the practice**

The rationale for this case study stems from the idea that better collaborative practice within a community context that has learning at its core would have a greater impact on the quality of education and life of those involved. This naturally presents a number of challenges in terms of the principles to be adopted and the leadership, management and resourcing of the learning community. Literature suggests that the terms 'learning' and 'community' should be defined separately and in context together (Bolam *et al.*, 2005).

This suggests a shared interest and commitment in a particular area in which all involved are keen to develop. The critical element is that it is about people and purpose and not structures (Anderson and Wood 2003). Renshaw (2003) suggests that the term community is a difficult term to define in our modern technological and transient era as it suggests a certain closeness, compatibility and mutual support. Indeed Millar (2005, p6) describes communities as '*a bit like wrestling with a piece of jelly*' when recognising that schools are important in binding communities but bringing children from outside the immediate locality of the area makes the term seem less applicable.

Some researchers would argue that communities can be across 'geographical areas and organisational boundaries' because they are about the relationships that are created and the mutual trust and support that is developed (Anderson and Wood 2003; Watkins and Marsick 1993 p11). These groups of like minded people can be informal or formal groups (Wenger 2005) who bring resources, ideas, knowledge and experience that can be shared through sustained interaction over a period of time. Like all relationships, there can be tension and conflict which have to be managed, but it is the dynamic process that takes place where knowledge can not only be shared but also created (Renshaw 2003, Wenger 2005).



The term learning communities suggests that those involved have a commitment to education and development within their own particular context. The focus is on learning rather than teaching per se. Learning communities can be defined as a climate of professional development and educational reform where learning is at the centre of the process (Peters 2002). Hargreaves (2001) argues that all communities should be learning communities as learning can take place in formal and informal contexts. Consequently, it is less about the end product and more about the process where shared enquiry and reflection in the workplace context can take place which can lead to a better understanding of learning (Cordingley 2003).

Hargreaves (2001) defines three fields of knowledge which are incumbent within a successful learning community. The first is, practitioner knowledge, which is the experience and expertise that an individual brings to a particular context. The second is public knowledge which is the theory, research and examples of best practice. The third is knowledge creation which can be created collaboratively through enquiry. This will be new knowledge to the individuals engaged in this process which is not necessarily original, but that which supports contextual learning and development (Hargreaves 2003). The learner therefore can be defined as not only the pupil/student but also as the teacher/lecturer in a shared learning and experiential process (Dewey in Kleine-Kracht 1993).

The term 'learners leading and leading learners' (Senge 1990 in Retallick 2005, p4) is used to describe the people and the process in not only the educational context, but also at home and in the community (Hargreaves 2001). If 'situated and contextual learning' (NCSL 2006, p10) becomes habitual then individuals can bring experiences and training back into the workplace context and develop that learning. Renshaw

(2003) argues that the teacher is not just an advocator of learning but is engaged in the process of critical reflection of his/her learning and facilitates learning in others. This is an ongoing and dynamic process which suggests that the pedagogy of teaching and learning styles is equal too, if not more important than the actual content itself (Cordingley 2003, Hargreaves 2001). The new Qualification Curriculum Authority (QCA) curriculum review (2007), still in draft status, is promoting learning at the heart of the process through principles, concepts and skills rather than through a content driven curriculum. This may be problematic as schools are traditionally content driven and are 'steeped in tradition, heritage, continuity and consolidation of processes, practice and content' (Senge 1990) and 'think they are custodians of a special craft' (Sellars 1996, p22). Moreover, Gee (2000) suggests that there should be caution in the promotion of lifelong learning through 'a portfolio generation of cumulative records' to show evidence of professional learning and development could be interpreted by some as a 'condemnation to compete and not about choice' Perhaps this cautionary perception needs to be borne in mind as the new standards for classroom teachers come into the equation.

The workforce reform, specialist school status, training school status, education action zones, the PE, school sport and club links strategy are just some of the educational developments that suggest learning communities are far more than a focus on individual schools but across schools and local communities. The NCSL has during the last few years developed a wide range of resources through case studies and research into learning communities as networks details of which are in the 'Learning networks: publication directory' (2006).

In essence, networks are an extension of learning communities demanding creative thinking in a vertical and hierarchical structured school context



(NCSL 2006). Leading the learning network presents further challenges particularly if it is across a series of networks with particular learning foci. Church (2002,) uses the image of a network as threads and knots whereby the threads can infiltrate across a number of school and community groups. It is the brokerage of that learning network, either through an individual and / or small group built on trust and communication which determines its success reflected in the 'tautness' of those knots and threads' (Church 2002. Communication that is informative and developmental across a learning network requires consistency and good interpersonal skills. This can include a variety of formats including websites, email, letters, newsletters and regular meetings which are effectively timetabled to ensure maximum participation. Administrative support to facilitate the information sharing process is critical to the operation of effective networks (NCSL 2006). Similar to the leadership of a learning community within a particular school context, leadership should be distributed and facilitative built on shared values and vision (NCSL 2006). However, leading and managing this development on behalf of the network is challenging. The NCSL (2006) implies that this requires the creation of a framework informed by research and good practice that guides and supports the leadership and delivery within the individual elements that make up the network as a whole. To make these networks successful it requires leadership that demonstrates clear vision, energy and effort (NCSL 2006)

## **Learning Communities - structure and implementation**

Utilising the concept of school and community clusters, the challenge within the national PE ITT project was to develop a particular case study to support ITT and CPD and to address the elements of the rationale identified earlier. In addition, the cluster concept was developed further through incorporating the philosophy of professional learning communities. Theoretical underpinning, scholarly activity and resources produced by the National College for School Leadership were to support a framework for action on which the development is based and indeed continues to inform each stage of development. A three year operational action plan (2005-2008) with an annual review process informed by a variety of research methodologies not only supports the strategic implementation of the project but also facilitates a process of reconfiguration and informs the strategic direction of the next stage in developments.

The LJMU Partnership of PE schools across the north-west region were divided into eight geographical clusters based on the number of school placements, the school sport partnership landscape and the size of the area. The Learning Communities project to support ITT and CPD in PE was officially launched in July 2005 with a conference to begin to share the rationale and raise awareness of potential developments. Within this meeting schools were asked to reflect on internal/external moderator's feedback in conjunction with the original thirteen key aims of the national PE ITT project and identify specific areas of need within their own learning community. This was to form the basis for developments during the initial twelve month period and subsequent two years.

Mentors who met the specific criteria identified in the cluster coordinator role description were invited to apply and a number were appointed to establish, lead and facilitate the learning



community, through 'a shared expertise and passion for joint enterprise' (Wenger, 1999, p2) in initial teacher training. The cluster coordinators are supported by the University's full and part time staff. However, through empowerment of the mentors the aim was to promote the engagement and ownership of the developments within each of the learning communities to support high quality ITT. Each cluster coordinator comes from a variety of different experiences and contexts including senior managers in school, advanced skills teacher, heads of department, school sport coordinators and aspiring leaders in PE. Moreover, in three of the larger clusters two coordinators were appointed in each who were able to not only support each other but also facilitate a mentoring process. Cluster coordinators were matched with the university's part and full time staff who already worked or who were to work with the partnership schools identified within a particular learning community. This created small teams who would lead and facilitate the cluster developments, together with supporting each others professional development. This could be through a variety of formats: for example, the teams planning and facilitating meetings, inviting full time university staff or teachers with particular expertise to provide insight into regional and national developments such as the 14-19 PE agenda and the QCA curriculum. Full time university staff are also part of the quality assurance process ensuring that consistency was maintained between centre and school based training. However, it is the cluster coordinators who take the lead and their particular challenge is to lead and facilitate their learning community meetings, so that the school based tutors can take ownership and feel empowered through the knowledge that is shared and developed to enhance the quality of experience for their trainees and ultimately their pupils.

Human resource funding was secured in the first instance to enable the cluster coordinators to be released from their school role for five days per academic year to '*coordinate and manage a school and community cluster that promotes high quality Physical Education Initial Teacher Training that meets the needs of every trainee*' (LJMU 2005 p1). Their roles and responsibilities included planning, leading facilitating and evaluating three mentor training sessions per year and to work with the mentors within the cluster to develop a cluster project based on an identified area of need linked to the national PE ITT project. These meetings would take place at schools within the learning communities on identified dates and times mutually agreed by those that attended the meetings. This included trialling different times of the day for the meetings to see which best suited the needs within their learning community and to assess the commitment of the schools.

Coordinators were also expected to support the communication and engagement process of school based tutors in attending the meetings through direct communication with the schools.

Communication and the sharing of information within the individual clusters and across the learning network as a whole has been supported by termly newsletters, an email facility and administration support at the university. Having an identified administrator to support the learning communities has supported the relationship between school and the university together with enhancing the communication process (NCSL 2006). Coordinators can utilise this administration support in their planning, preparation and evaluation of meetings.

The cluster coordinators and university based staff were supported in their role and their own continuing professional development through attending three training meetings per academic year at the university led by the PE ITT regional coordinator. Over the last three years training and development has incorporated a number of key elements including:



- Concepts and principles of learning communities including leadership
- National PE ITT project development plan
- Mentoring and coaching skills
- Findings from the internal and external moderation process
- Information about national developments

The challenge for the Cluster Coordinators was to work with their groups of school based tutors using the principles and skills needed for leading learning networks to identify the developmental needs of the group based on the national PE ITT action plan and then to begin to address them.

### Summary of methods used.

Questionnaires were distributed to all 150 PE partnership schools with a 25% return rate. Four cluster coordinators and four mentors were interviewed from across the learning communities. Data collated from the evaluations of meetings including comments from mentors in attendance were also analysed. Direct quotes have been used from the cluster coordinators [CC] and mentors [M] to provide evidence of impact.

### Impact to date:

The most significant development to date has been a change in **culture** that has been developed from all partnership mentors attending training at a central venue at set times in the year; *'Prior to the learning communities we would go to the university as separate people and come away without any real collaboration between teachers from partnership schools'* [CC] to a culture of **openness and collaboration** where *'expertise is identified both from individuals and from different schools using this sharing of expertise to move other people forward'*[C]. This seems to emulate Eckert and Wenger definition of a community of practice which is

*'An aggregate of people who come together around some enterprise. United by this common enterprise, these people come to develop and share ways of doing things, ways of talking, beliefs, values - in short, practices - as a function of their joint involvement mutual activity'. (1999, p2)*

Mentor evaluations have identified the *'excellent opportunities to network'* within and across *'geographical areas and organisational boundaries'* (Watkins and Marsick 1993 p11), *where the needs of the mentor and the trainee are addressed'* and it provides opportunities *'to share work with other schools, moderate practice and develop and share good practice'* [M]. It has also *'heightened and strengthened the links with the university'* [CC] through university staff working collaboratively with the *'teachers creating an infrastructure'* [CC] of *'people and purpose not structures'* (Anderson and Wood 2003) and through the professional development that cluster coordinators receive during the meetings with the leader of the learning communities project. *'My knowledge of PE ITT has definitely increased by the inset we have received, it has been immense, in that respect so that empowers you and makes you feel more confident'* [CC]. The importance of credence both in terms of recognition of the expertise of teachers and the demanding environment in which they work together with the knowledge and skills that university staff can bring to the learning context forms the basis of this collaboration (Hawkins 2002). This openness and sharing of practice has taken place within the individual learning communities and across them through communication and through learning conversations led by the teachers at the annual conference.



*"The amount of collaboration and sharing was impressive. The learning conversations which concluded the projects revealed a real sense of sharing in the evaluation with some very specific ideas for the further development of this work"* (B. Brush Teacher Learning Academy Regional Advisor July 2007)

The **shared vision** of the issues identified in the PE ITT action plan provided a common purpose or framework at the inception of the project (NCSL 2006). This encouraged learning communities to *'come together more often with a specific purpose'* that allows clarification of what we really want to do and what we should be doing with ITT students' [C]. It also ensures that *'all students have an equal chance of similar experiences on their teaching practices'* [M]. As the groups developed and Cluster Coordinator's became more confident then agendas broadened to encapsulate ITT and continuing professional development items *'such as the new key stage 3 curriculum or the difference between BTEC and GCSE'* so that *'mentors can then take it back to their schools and their trainees'* [CC]. One mentor remarked that the meetings were *'an integral part of his CPD'*. Moreover, mentors have engaged in this process because they have a sense of ownership *'allowing them to help set the agenda so they've had a part in actually setting out what we are going to do'* [CC]. This echoes the importance of the process of shared enquiry and reflection rather than JUST an end product (Cordingley 2003) and knowledge creation through enquiry which is new to the individuals engaged in the process (Hargreaves 2003).

Indeed, through the **improved communication** within and across the learning communities *'there really is now a feel of people working together towards one common end'* [C]. Church supports this stating that good communication and trust are critical elements in ensuring the

effectiveness of a learning network (Church 2006). As the initial three year action plan has come to an end, each learning community has felt empowered to write their own action plans around the initial teacher training agenda and continuing professional development needs. *'What has worked well is having a focus on ITT and on an aspect of CPD that mentors can then take back into their schools and back to their trainees'* [CC]. This highlights the importance of leadership that has clear vision and the necessary skills to continually support, refocus and realign the network as progression or change occurs which is provided by the University overall and translated into each learning community by the cluster coordinators (NCSL 2006).

Attendance at meetings has improved particularly in a number of the learning communities as they see it *'enabling them as mentors in ITT, networking and it addressing their own CPD needs'* [M]. *'Geographical location, timing of the meetings and 'communication is really important so that mentors know the agenda well in advance'* [CC]. This has included some schools that currently do not have ITT students who see it as important to keep in touch with developments. Cluster Coordinators have also used other strategies to improve attendance such as encouraging departments to *'send another member of staff if the relevant mentor cannot attend so that 'the school actually knows what is happening and they can go and cascade this down'* [CC]. In addition, they have striven to place ITT on the wider CPD agenda within local authority heads of department meeting. This has been particularly successful in one LEA where ITT is a set item on the agenda *'which provides the opportunity of grabbing more people and impacting on more schools'* and *'has allowed the communication and collaboration of current developments and best practice'* [CC]. Attendance is still problematic in some learning communities and often it is not the fact that supply cover is available but finding an



appropriate specialist supply teacher to cover the lessons. Mentors themselves are frustrated by their school's senior management team 'to allow them time to attend meetings'. Twilight sessions have been more successful in some of the learning communities but this can be affected by the extra-curricular programme. Mentors that attend the meetings get frustrated by those that do not attend, remarking on the fact that 'there are no real barriers to attendance' with the 'dates organised well in advance there would be cover within the department' (M). Yet as one cluster coordinator remarked 'ITT should be on the agenda in every partnership school' and that '**people see ITT as part of the whole rather than a little bit that is attached to some schools... the next stage really is to spread that message further** [CC]. The TDA 2007 CPD strategy endorses this lifelong learning approach through the professional standards for teachers, the process of mentoring and learning communities that promoted continuous ongoing collaboration.

Cluster coordinators **confidence and expertise** has grown as the programme has developed through being given the opportunities to 'plan and deliver inset' together with 'working with people who appreciate what you are doing' both 'within your own cluster and across clusters helps as well as it adds to your role as cluster coordinator and mentor' (CC). The cluster coordinators own personal and professional development through the programme has facilitated their leadership role. 'I think the impact on myself has been huge, as I have thoroughly enjoyed my role and it has actually made me see problems that mentors have and it has really made me think about their needs in terms of ITT'. (CC). This addressing of mentor needs is supported by mentor evaluations that comment on 'a very effective meeting demonstrating highly informative information that is critical to the development of my trainees and 'gained specific information for me as a mentor on the structure

and content of meetings with my trainee' (M). Moreover as confidence and relationships have grown cluster coordinators have developed a much more **facilitative style of leadership** (NCSL 2006).

*'At the beginning I felt very much that I had to set the agenda, but as I've gone through and got to know people and realised they have an equal amount of expertise to me I have developed the confidence to throw out part of the training and have the confidence to know that they will do it well' [CC].*

It is the notion of that within the network where there are a number of 'leading learners, 'learners leading' across a network of schools and organisations that supports increased capacity and 'social capital' through dialogue (West-Burnham and Otero 2005), there is still a need for senior leader(s) who provide the guidance through clear vision and the format of a framework. (NCSL 2006).

Mentors appreciated the leadership skills of the cluster coordinators commenting on the 'very good team leaders who have recently been through the training processes and appreciated the 'opportunity to engage in 'open discussions that allowed all participants to be involved' through a relevant and interesting agenda that was structured around 'clear and concise objectives'. A point endorsed by Church 2006 (in Bruce and Norden 2007). New mentors also felt that their needs were being met through 'a welcoming and explanatory meeting that helped to make me feel more confident and relaxed, providing a 'deeper understanding of my role and best practice'. Mentors have also **felt empowered to share their own practice** in areas which provided others with 'excellent ideas to take back to school'. Clusters have focused on ICT and some mentors found this extremely useful, 'offering lots of opportunities to experiment with ICT - ideal for the personalised learning agenda'.



In addition to mentors sharing practice, **expertise from the university was welcomed** and endorsed the sense of partnership as mentors were *'keen to work with the university on developments in relation to the new national curriculum'*. Huberman and Miles (1984) argue that good external support from organisations such as Universities and Local Authorities is critical in the change and improvement process therefore developing such collaboration within networks is important. Indeed, Hargreaves (2003) supports this view of a *'critical friend'* from external agencies such as higher education to link with evidence, research and expertise in order to move beyond just sharing and collaboration in order to validate what is good practice or not.

Knowledge and understanding directly related to the **mentoring in ITT process** and the **wider continuing professional development agenda** have improved the quality of PE ITT. Clusters have engaged in developmental work such as producing a dvd resource on assessment for learning dvd *'which is now used for all our students'* [CC]; providing ICT inset for *'both mentors and trainees alike'* [CC]; producing a DVD resource to support standardisation of lessons in relation to the standards and the response we have had from students and mentors has been great [CC]; providing subject enhancement sessions for trainee teachers whilst on placement delivered by the mentors themselves; creating a structure of cross moderation for mentors and trainees alike which was appreciated as it was *'good to analyse levels of lessons and agree with colleagues as a moderation process between schools and departments'* [M]. This reflects the concept of 'learners leading and leading learners' (Senge 1990) where experiences and training can then be taken back to the workplace context (NCSL 2006).

The collaborative culture has promoted a *'sharing of practice and resources'* and *'being kept up to date with current developments'* [M] which has developed the confidence of mentors through the range of experiences that have been provided so that they can share those experiences with their trainees [CC]. This is reflected in the annual learning communities conference at the end of each academic year to enable clusters to share their developmental work which is based on a series of learning conversations led by the cluster coordinators and mentors. Over the last two years those who have led the learning conversations have used them as a basis to gain the level one recognition of the Teacher Learning Academy. On observing and verifying this work a Regional Teacher Learning Academy Advisor perhaps summarises the evidence of impact to date of the PE ITT learning communities.

*'I was enormously impressed by the work these teachers had done on a number of levels. First, the teachers own development and pride in their achievement was clear to see and secondly, the inclusive nature of the projects ensured that their colleagues, the student teachers and pupils also benefited from the work... The work that these teachers have done will have a significant effect on the quality of PE teaching and the quality of the learning experiences of pupils.'*



## Conclusion

Leading and managing the mentor development in a large partnership of schools across the north-west region and trying to address the challenges highlighted in the opening paragraphs of this article is problematic. The learning communities model has been adapted and implemented to create a collaborative rather than just a cooperative approach to sustaining and developing high quality PE ITT and in doing so provide professional development for all those involved. Evidence to date suggests that there is impact being made significantly through a change in culture. However, partnership in training demands that the ITT Provider and its partnership schools work closely and all contribute to this process. This has implications for the way that partnership is resourced which includes a different way of working for both the ITT Provider and its partnership schools. The key is to find ways of aligning existing funding to support the network (NCSL 2006) and to consider the leadership and resources necessary to sustain and develop them (TDA 2007).

In this learning communities model the mentor is the focal point both in valuing this crucial role in the ITT training process but also in ensuring that high quality training is occurring in the partnership schools. Through establishing this 'community of practice' (Wenger 1999) in mentoring there is a real desire to communicate, share practice and engage in developmental work. Yet there is still the issue that some schools who have trainees do not attend training (Brooks 2000; Keay 2005). In order to address this concern and in particular to value and further develop the role of the mentor Liverpool John Moores University have devised and implemented a framework for mentor recognition and accreditation linked to the new professional standards for teachers. That will be the focus of the next stage of the research and indeed, the next article?!

## References

- Anderson, J and Wood, D (2003), Towards the learning profession: identifying the characteristics of successful continuing professional development in schools, *Paper presented at the British Educational Research Annual Conference*.
- Armour K, Yelling M (2002), 'Looking with fresh eyes': ways forward for CP in physical education. *Research paper BERA* September 2002.
- Armour K, Yelling M (2003), Physical education departments as learning organisations: the foundation for effective professional development. *Research paper BERA* September 2003.
- Bolam et al (2005) Creating and sustaining effective professional learning communities. DfES Funded Research Report RR637
- Brooks, V (2000) 'School-based Initial Teacher Training: squeezing a quart into a pint pot or a square peg into a round hole?' *Mentoring and Tutoring*, 8 (2) 99-112.
- Brush B (2007) Presentation at the LJMU PE learning communities conference. Liverpool 2007. Teacher Learning Academy Regional Advisor
- Church M et al (2002) Participation, relationships and dynamic change: New thinking on evaluating the work of international networks. NCSL [www.ncsl.org.uk](http://www.ncsl.org.uk) September 2006
- Cordingley P (2003) Knowledge creation and management - building and enquiry and research strategy for network learning initiatives. *Research paper BERA*.
- Dewey J (1929) The sources of science education in Kleine-Kracht P.A. (1993) The Principal in a learning community. *Journal of School Leadership*, 3 (4) 391-399
- DFE (1992) Partnership in Initial Teacher Training; DFE London.
- DFEE1998 Revised professional standards for teachers. DFEE London
- DfEE (2001) Learning and teaching strategy: A strategy for professional development. *London DfEE*.



- DFES (2007) *Entering New Worlds: From best practice to next practice*. [CD Rom].
- Gee J (2000) Teenagers in new times: a new literacy studies perspective in: Renshaw
- P.D.(2003) *Community and Learning: Contradictions, dilemmas and prospects Discourse: studies in cultural politics of education*, 24(3) 355-370.
- Hargreaves, D. (2001) *Opening minds, increasing opportunities: the future of the school curriculum. RSA conference January 2001*.
- Hargreaves, D. (2003) *The knowledge-creating school. NCSL Nottingham*.
- Hepworth N.J. (1999) 'Continuity and progression: Key stages 2 and 3', *Bulletin of PE* vol35 no 1 pp23-35.
- Hepworth N.J. Shenton P.A. (2006) *Preparing trainees for engagement with Physical Education in the wider community. Continuing Professional Development Programme - Advice and Support Material www.peitte.net*
- Huberman M. and Miles, M. (1984) *Innovation up close; how school improvement work works*. Plenum Press, New York.
- Keay, J (2005) *Developing the physical education profession: new teachers learning within a subject-based community, Physical Education and Sport Pedagogy*, 10 (2) 139-157. *LJMU 2005 Learning Communities Policy Document. LJMU*
- Millar F (2005) 'Schools are what bind communities', *Guardian* 6.12.05
- National College for School Leadership (2006) *Learning about learning networks. NCSL Nottingham*.
- National College for School Leadership. *Learning networks: what do we now know? www.ncsl.org.uk* May 2007.
- Peters J 2002 'Expecting too much from school / university partnerships for school improvement, BERA Exeter September 2002
- Shenton P et al (2005) *Physical Education Initial Teacher Training Project Action Plan. Training and Development Agency funded project 2004-2007*
- Renshaw, PD (2003), *Community and Learning: contradictions, dilemmas and prospects', Discourse: studies in cultural politics of education*, 24(3) 355-370.
- Senge P (1990) *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday in: Cocklin B, Coombe K, Retallick J (1999) *Learning communities in education*, London Routledge
- Shenton, P (1994) 'Education and training through Partnership: a possible way forward', *British Journal of PE*, 25 (4), 17-20.
- Shenton P (1996) *Physical education and sport in partnership! Is the Youth Sport Trust realizing a national vision through a local recipe of good practice? British Journal of Physical Education* 27(2) 17-19.
- Training and Development Agency (2007) *Draft revised professional standards for teachers*.
- Training and Development Agency (2007) *Continuing professional development: a strategy for teachers*.
- Watkins K. E. and Marsick V.J. (1993) *Sculpturing the learning organization*. San Francisco: Jossey-Bass
- West-Burnham J, Otero G (2005) 'Leading together to build social capital', what are we learning about...? *Community leadership in networks NCSL, Nottingham*.
- Wenger (1999) *Communities of Practice Learning, Meaning and Identity*, Cambridge University Press.
- Wenger (2005) *Communities of Practice in Government: Leveraging Knowledge of Performance. www.wenge.com* April 2007.
- Nicky Hepworth is a senior lecturer at Liverpool John Moores University with responsibilities that include leading the Teach First Programme on Merseyside and Faculty Coordinator for Learning Communities and Mentor Recognition and Accreditation**