Feedback for Learning

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5 Feedback between teachers

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In this chapter I describe the orientation and common practices I have met when working with teachers who are offering each other feedback in a range of school settings. After analysing these practices, the assumptions underlying them and their shortcomings, I propose three extensions to current practices and offer some impressions on their use.

For the last ten years a proportion of my work has been with teachers mentoring other teachers in four main contexts: experienced teachers with beginner teachers, colleagues mentoring newly qualified teachers, general mentoring in a school for newcomers and those new in role, and experienced headteachers mentoring new headteachers (Watkins 1992; 1997a, b; Watkins and Whalley 1993; 1995). Although some teachers accentuate the differences between these four roles, I see significant similarities in the relationships which are developed. I have also been involved in staff development for appraisal, and have worked with schools interested in paired learning for teachers. In this chapter, if I use the term mentor, I do not intend to allude to the formal aspects of schemes, rather to a teacher who is engaged in supporting the learning of another teacher. And if I use the term 'learner teacher' I mean any teacher at any point in their life/career.

CURRENT CONTEXT: AN ORIENTATION TOWARDS PERFORMANCE EVALUATION

In the contexts I meet, a pervasive orientation emerges which influences the content and practice of one teacher 'giving feedback' to another. This orientation is highly evaluative as though the role of the person giving feedback was to judge the performance of the other and somehow pass on that judgement. The unanalysed basis of this orientation is made clear when I point it out to colleagues and they reply 'Yes, of

course that's what we aim to do', and no alternatives are imagined possible.

Now I do not conclude that there is a prevalent feature of the 'personalities' of these teachers which explains the focus on evaluation, and on the observable performance aspects of their colleagues. Rather I have come to recognise a very strong set of forces in the environment which play a large part in creating this picture. Let me mention three. First, the dominant discourse in our education system currently is one emphasising performance. The advent of 'performance tables' for schools, a focus on pupils' test and exam performance, and talk of 'performance management' for teachers, all play their part. The discourse of 'standards' and the addition of mechanical approaches to target-setting – both for teachers and for pupils – add to the picture. Second, the act of classroom observation can unwittingly engender an orientation which focuses on the teacher rather than the whole event and on assumed deficits rather than the complex detail of interaction and learning. For example, when teachers observe a video of a classroom: if given no structure for their observations and no guidance for their role, observers tend to focus on the teacher and focus on the negative. In doing so they adopt the role of hostile witness which is all too prevalent in the public discourse on the inspection of schools. Third, life in classrooms is full of evaluation: a public evaluation of someone or someone's performance is made in a classroom every couple of minutes (Doyle 1980). The effect of this on teachers' perspective is considerable in my view: they tend to react with suspicion to the addition of further evaluative schemes, as is evidenced in reactions to teacher appraisal, and they do not accept the views of policy-makers which seem to imply that the purposes of education are encapsulated in what may be assessed.

I am convinced that these environmental and situational forces explain the performance evaluation orientation because of the variations I see, both within and beyond teacher mentoring. It appears most in initial teacher education where 'standards' and competences dominate much of the school-based agenda, and teachers assess beginners. Until recently it has been a little less intense in the mentoring of newly qualified teachers, and, of the teacher contexts, it is at its least in headteacher mentoring, where the main theme is handling multiple pressures while still leading a learning community. This orientation is not present in other mentoring contexts I have experienced, for example a mentoring scheme for black and ethnic minority employees in the BBC (Watkins 1997b). In that setting 'feedback' is rarely mentioned and is not problematic – the idea that the mentor is to judge the mentee's performance

simply does not arise. Instead, and with little guidance, the mentor–mentee pairs get on with constructing a highly engaged programme of activity, exchange and discussion to promote learning.

It's a hard job at the best of times to help another person learn, and the contextual pressures on teachers do not make it any easier.

WHAT'S WRONG WITH PERFORMANCE ORIENTATION?

Lest anyone be in doubt, or those who have adopted the mechanical discourse try to read me otherwise, I seek the highest quality in teachers and expect to see this reflected, in part, in the way they are in classrooms. What is at issue is how high levels of performance should be achieved, and this soon relates to the issue of how high levels of performance are conceptualised. The problem with a performance stance is that:

• it does not promote optimum processes and levels of learning;
• it may mis-represent what is most important in teaching;
• it may damage learning relationships between teachers;
• it may lead to lower standards in the school system.

The difference between performance orientation and learning orientation has been researched since the ground-breaking work of Carol Dweck (see, for example, Dweck 1986; Dweck and Leggett 1988; Smiley and Dweck 1994). Learners with a performance orientation persist less, have more negative views about their abilities and display helplessness when the task is difficult. By contrast, those with a learning orientation show greater persistence, have flexible views of themselves, and are more likely to work effectively in solving difficult problems. So to emphasise performance rather than learning as a goal can be counter-productive.

The performance idea that the important things about teaching are the observables does not fit with current understandings of pedagogy which highlight the complexity of orchestrating the classroom context, the multiple nature of teacher knowledge and the connected nature of teacher understanding (Watkins and Mortimore 1999). It may also blind us from other avenues through which teachers learn, including reflecting on their conception of teaching (Freeman 1991) and hearing narratives of other learners who have made the transformation to teaching (James 1997).

If teachers behave towards each other like hostile witnesses, this may put at risk the trust which is necessary for building a sense of professional community in a school, a major feature of it as a learning community (Kruse *et al*. 1995).

In the current context where schools are judged by performance measures, the most recent evidence (Gray *et al*. 1999) shows that the most improving schools maintain an overarching focus on learning. Given that the knowledge base in society is expanding and changing rapidly, and skills of learning about learning are recognised as important for pupils, a focus on teaching as performance seems increasingly anachronistic, and unlikely to elicit the most from the school system. As Doyle puts it: '[the use of] generic indicators of effectiveness and isolated classroom practices . . . will inevitably narrow and distort the purposes and achievements of schools' (Doyle 1990: 354).

PERFORMANCE FEEDBACK: COMMON PRACTICES AND THEIR IMPACT

Discussions between teachers following a shared experience of a classroom are often handled with a very high focus on judgement of personal performance: in the case of conversations between beginner teachers and their mentors it can constitute up to 60 per cent of the exchange (Haggarty 1995a). Yet nearly a century ago Dewey highlighted the dangers:

> It ought to go without saying (unfortunately it does not in all cases) that criticism should be directed to making the professional student thoughtful about his work in the light of principles, rather than to induce in him a recognition that certain special methods are good and certain other special methods bad. At all events, *no greater travesty of intellectual criticism* can be given than to set a student to teaching a brief number of lessons, have him under inspection in practically all the time of every lesson, and then criticise him, almost if not quite, at the very end of each lesson, upon the particular way in which that particular lesson has been taught, pointing out elements of failure and success. Such methods of criticism . . . are not calculated to develop a thoughtful and independent teacher.
>
> (Dewey 1904)

The focus on judgement is reflected in rather than challenged by much of the 'practical' advice which is given to mentors and appraisers.

The advice 'Start with the positive' has been widespread, so much so that it has influenced roles and expectations in a subtle but widespread fashion. Many teachers who are receiving feedback now expect it in this form, and are sitting quietly waiting for the negative to arrive. I have even experienced secondary school students remarking on a progress report from a teacher: 'Ah, but he's starting with the positive'. More recently a new variant of this advice has arisen: the 'feedback sandwich' – positive, negative, positive. Attempts to disguise the judgement of 'good and bad' by the common language of 'strengths and weaknesses' does not cover up the basic stance of judgement. A clear recognition of this comes from an eleven-year-old boy: 'They talk about strengths and weaknesses but strengths are always the things we need to get more of and weaknesses are what we've already got' (Perry 1999: 65).

Such 'positive and negative' communication is not integrated by the receiver, but organised into separate categories in a process of compartmentalisation (Showers 1992). We subsequently activate positive self-aspects, and minimise access to negative information. It promotes defensiveness on the part of the 'receiver'. Many beginner teachers learn how to 'play the game' of evaluative relations with their mentors. Disagreements or extended discussions of the performance judgements are not a common part of the conversation: rather an atmosphere of politeness descends, and both parties work to get the event completed with minimum difficulty.

So instead of seeking and welcoming feedback as a source of interest and learning, feedback for many teachers becomes something which you didn't necessarily ask for, but which punctuates your life and learning in ways for which you find methods of coping. Systems of appraisal can become ceremonial and perfunctory (Frase 1992), with little or no impact on improving teaching and learning, only complied with to meet policy requirements. Such schemes are looked upon with suspicion by many classroom teachers. Streshly (1992) suggests that teachers view performance through standardised testing with anxiety and resentment, because the results threaten to judge incorrectly their efforts, and the fact that some managers regard testing as another means of teacher surveillance only reduces the value of the feedback to teachers. Surveillance does not provide the conditions for teachers to take active responsibility for their learning.

Defensiveness may also emerge for the mentor, as shown in a limited focus (Edwards and Collison 1995), and the fact that they talk a lot. As one researcher concludes: 'many mentors talk about their own generalised theories of teaching, with little reference to the realities of

practice. Listening to students and addressing their learning seems to take place only occasionally, if at all' (Haggarty 1995b: 41). Similarly, Zeichner and Liston (1985) found little focus in post-observation discussions on what students were trying to accomplish – their reasons and goals. Which is all the more frustrating given the comment: 'Almost any kind of feedback can be enjoyable provided it is logically related to a goal in which one has invested psychic energy' (Csikszentmihalyi 1990: 57). Even in headteacher mentoring, a focus on clarifying and realising goals may be missing: Southworth's (1995) review concludes that although there is the potential for stimulating critical, reflective, learner-oriented leadership, the reality may be more one of passing on conservative role assumptions.

The responsibilities of the two parties can become distorted. The person giving feedback appears to take on a responsibility for the other person's development, especially if they also start to set targets for the other person to achieve, and the receiver in turn does not engage her/his responsibility in that process.

To avoid the negative impacts outlined above, current practice can be extended by extending the focus, goals and conception of feedback. I find that teachers engage with such extensions readily: they affirm them as learning professionals in a way which takes them out of the rut of the dominant assumptions.

EXTENSION ONE: THE FOCUS OF FEEDBACK

A first step towards improvement may be to extend the focus of feedback wider than the performance judgement in current practices. In the list below I propose nine different types of feedback, each of which has a different focus: an attempt has been made to offer an indicative example as though the feedback agent was another teacher.

- *Data feedback* – aspects of performance
  Example: 'you used twelve closed questions and three open ones'
- *Contextual feedback* – data on features of the social or educational context
  Example: 'these pupils have a negative reputation in the school'; 'they haven't been taught about fractions yet'
- *Information feedback* – data which have been selected and interpreted to inform
  Example: 'when you gave the class a collaborative group task they seemed to be more engaged'

- *Knowledge feedback* – what has been learnt, what meaning created
  Example: 'your second explanation of floating made new sense for me and for some of the pupils I think'
- *Vision feedback* – how participants perceive the purposes and goals
  Example: 'your description of doing mathematics was inspiring'
- *Process feedback* – how the social and interpersonal processes operate
  Example: 'it seemed that the task didn't really reward collaboration, since dominant leaders emerged in the groups'
- *Improvement feedback* – what would make a difference
  Example: 'some of the class suggested that they needed more time on the second activity'
- *Change feedback* – how innovations are being received
  Example: 'I had the impression that they enjoyed the new challenge of text analysis'
- *Learning feedback* – metacognitions which have been stimulated
  Example: 'while watching this class I wondered about the depth of ideas in one I teach'

All nine types are examples of feedback as it is commonly understood: one person making comments to another person on aspects of a shared experience which s/he, the reporter, has selected. Nothing has yet been said about whether, or under what conditions, any of this process may support learning. Perhaps the later types in this list suggest a different way of handling feedback that could lead to a different type of learning, but the notion of teacher feedback in relation to learning remains unquestioned.

However, my experience of seeing teachers experiment with some of these suggests that they find themselves involved in different types of conversation from those they had previously experienced, conversations with more depth and range. In this way they see more possibilities in a post-observation discussion, especially how most constructive feedback is free from evaluation (Kilbourn 1990). This is linked with broadening the focus beyond the person and can have significant effects. Kamins and Dweck (1999) have shown that when feedback is focused on the process rather than the person, whether it is criticism or praise, recipients subsequently display significantly less 'helpless' responses (including self-blame). So person feedback even when positive, can create vulnerability and a sense of only being worthy under certain conditions: this undermines subsequent coping.

The trend which is roughly implied in the above nine, also leads to

another step which is to ensure that feedback for learning lives up to its name and has an explicit focus on learning.

EXTENSION TWO: FEEDBACK FOR LEARNING

Teachers generally recognise that a focus on learning can enhance performance, whereas a focus on performance can depress performance: when they do so, they enable themselves to create much more generative exchanges. To promote feedback for learning, an explicit view on learning is needed. A simple model which highlights some of the steps in learning from experience is given in Figure 5.1a.

This model on its own can increase focus on the learner teacher's learning, and its various stages. It can sometimes highlight difficulties which a learner teacher experiences at one stage or another. It indicates that feedback must be sought, that a stock of strategies is needed for reviewing, and that choosing new action for the next cycle is a key element.

The model can also be developed to plan activities which promote action-reflection learning by the learner (Watkins and Whalley 1993). Such activities may be observations, investigations, or personal actions: they need to cover all four stages for the learning cycle to be complete (Figure 5.1b). This model can act as a useful framework for a learning discussion, following planned or unplanned activities, especially if plainly in view for all parties.

It now becomes possible to specify what someone whose aim is to offer feedback might best do in order to promote the cycle of action learning. At each stage of Figure 5.1c, what they offer parallels the stages of the learner's cycle.

While working on this framework with teachers, I have found the following:

- Starting with commentary helps to avoid starting with judgement. It affirms that the valuable extra contribution which is brought is observation, an extra set of eyes. A conversation which starts in this way is often appropriately focused on more than just the learner teacher.
- Moving to identify issues becomes less fraught for all concerned after some commentary has been offered, partly because it is likely that a real dialogue will have started, and the learner her/himself will be identifying issues from her/his perspective.
- The stage of offering analysis requires the person offering feedback
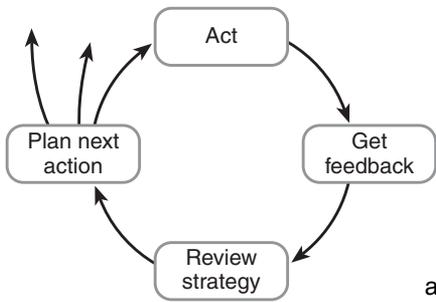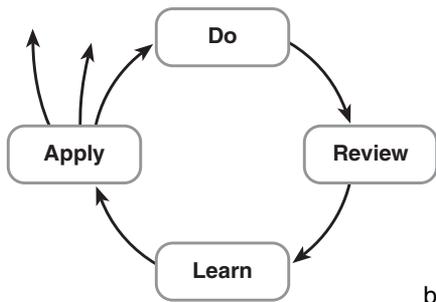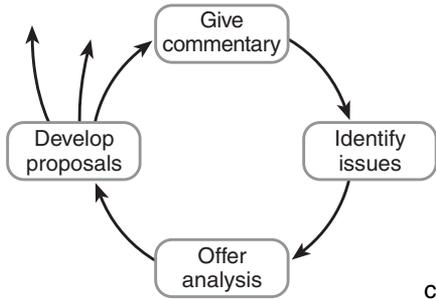
Figure 5.1 Elements in learning cycles and feedback cycles: (a) learning from experience; (b) planned learning activities; (c) feedback for learning

to be explicit on the view of classrooms which they hold such that they have identified the particular issues as important. It also reduces the risk of them taking too much time on generalised theories of teaching, with little reference to the detail.

- The idea of developing proposals together is not radical, but if it is done after a good analysis the learner teacher will be able to see, at best, how a colleague chooses practical actions to realise their image of a classroom.

The ordering of the four stages is important: teachers may already have available elements of all four, but structuring them in the framework seems to help them order their contribution to the conversation. Operation of this model also seems to help them clarify their own voice in a way which does not depend on making judgements. It takes the pressure off their construction of their role and reduces the anxiety which may previously have characterised their contribution.

I do not offer the framework in Figure 5.1c with the idea that one teacher extols his/her opinions in each stage and leaves the receiver to make of it what they will. The quality of interchange at each stage is crucial, and dialogic conversation is what is most likely to support lasting learning. That point requires us to recognise the view of learning on which it is based.

EXTENSION THREE: THE UNDERLYING VIEW OF LEARNING AND FEEDBACK

The third extension depends on unearthing and extending the views of learning which inform our approach to feedback. Bruner (1996) identifies four views of learning which have held sway in our times. Simply put, these are:

1   learning by being shown;
2   learning by being told;
3   learning by constructing meaning; and
4   learning by being part of a knowledge-generating community.

Each has an associated conception of feedback – except the first, a very simple model with the implied notion of imitation, which does not explain much and under-estimates a great deal about complex human processes.

Learning by being told is a dominant view: it relates to the idea of teaching as instruction, and in this view feedback is the correction of performance. This stems from a mechanical metaphor, in which the oft-quoted example is a thermostat: a sensor picks up information from the environment, and if the temperature is above a set level, the heating is

shut off; if the temperature falls below another level the heating is turned on again. This is a 'closed' system: it operates independently from other systems, and the range of options is limited: feedback reduces deviation from a norm, and maintains a status quo. Sometimes we think that this model of feedback describes human behaviour, such as learning a motor skill through self-corrective feedback. For example, when learning to steer a car, the driver learns how much to move the steering wheel, receives immediate visual information about the result of the action and can make corrections accordingly. In time the steering becomes smooth and accurate. However, this is a simple and idealised description of a closed system, and real-life steering is more complex. Other aspects arise – the sudden appearance of an oncoming car, an icy morning, whether the driver had breakfast, the driver's self-beliefs – and affect the real situation so that the performance may break down, showing the idealised view to be inadequate. The complexity of human motor performance has required that the notion of 'feed forward' be invented: people not only learn from the results of their actions, they also anticipate actions which have never yet occurred.

Attempts have been made to address social performance by analogy with motor skills. The social skills model (Argyle 1967: 70 – see Figure 5.2) gives a key role to feedback, but it soon becomes clear that this is not a simple process of 'correction'.

Each element of this model is highly complex: for example, the element 'translation' encapsulates the active 'reading' of the social world, the understanding of the social world, one's options in it and one's prediction about others' behaviour. Still the model does not represent real-life, real-time social interaction. It reminds us that feedback, like all other human communication, is always interpreted and its impact is subject to the person's goals and 'translation' processes. In addition, the
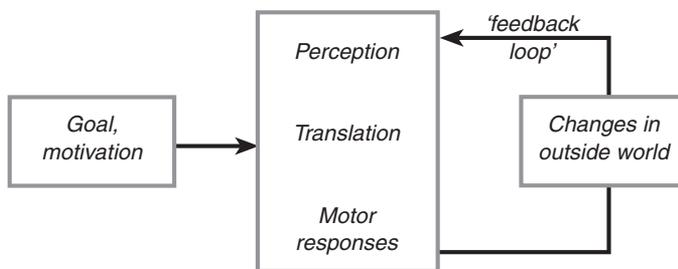

Figure 5.2 Model of social skills

simple assumption that someone who is 'giving feedback' is a credible source may not be valid, especially since mentors in many schemes are allocated rather than chosen.

The assumption remains that feedback 'given' is a major source of learning. Such a view can under-estimate the extent to which teachers learn from a range of sources (Smylie 1989) including their pupils (Meyer 1995). It can also down-play the significance of human beings being self-defining (Ford 1987). From this perspective, self-reflection is a more frequent and more crucial determinant of self-knowledge than social mechanisms including feedback (see, for example, Sedikides and Skowronski 1995).

The stability assumed by the closed system view may not obtain, as shown in those interactions which escalate. For example, if teachers read each other as threatening, their next response may be to increase demand or increase intransigence according to their goal or motivation. In work on families as complex systems, early ideas of feedback saw it as maintaining the homeostasis of the family. This view has been abandoned, as a partial view with mechanical assumptions (Hoffman 1993: 82). The contemporary shift in thinking has been to communication and conversation metaphors: in these, inter-subjective loops of dialogue may represent what we took feedback to represent. Thus we need to cast the notion of feedback into a communications concept, and focus on communicative processes between teachers.

This moves us to consider Bruner's third view of learning – the construction of meaning – reflecting recent research. The processes whereby one person supports another in constructing meaning are complex: the focus requires an important switch to the learner and their learning. One principle is to draw out their current conceptions and add variation to them, through reviewing experience with an explicit focus on meaning-making. Thus learners are supported in explaining to themselves the experiences they meet, and Chi *et al.* (1994) demonstrate that this improves understanding. Accumulated evidence about learning (Marton and Booth 1997) suggests it is more accurate to view learning as adding additional perspectives to our current meanings, rather than replacing the 'incorrect'. Indeed 'misconceptions' can have considerable longevity in the face of refuting evidence.

If we view teachers as complex makers of meaning, a different view of teacher competences is required from that which circulates currently. We need a view of the professional as having goals, being involved in their own learning, and having competences for learning about

learning. Figure 5.3 sketches competences which are important for high-level teaching and learning. Higher levels imply greater complexity and reflexivity: they may be founded on having some/many of the lower level competences in the repertoire. Upward movement through the levels is stimulated by the sort of learning which expands possibilities, helps the learner add extra variations to their repertoire, and helps them integrate these into a meta-perspective.

A meta-perspective highlights the important influence of context on learning, so that the view of learning as construction soon embraces the fact that for teachers this is taking place in a school. This was the fourth view identified by Bruner (1996): learning by being part of a knowledge-generating community. Sadly, many teachers say that their schools would not be well described in these terms. Nevertheless, schools with a collaborative approach to teacher relations promote ongoing learning and development for teachers, and for pupils, 'We also find that the greater teachers' opportunities for learning, the more their students tend to learn' (Rosenholtz 1991: 7). Here 'feedback' takes on a much more multiple view, and highlights the qualities of the context, where many parties interact and continuously produce and receive feedback. Learning is fostered through co-construction, exchanging narratives in the process we call dialogue, which again includes self-explanation (Chi 1996). It does not make for a uniform product, nor is it limited to officially sanctioned relations such as mentoring. Hawkey (1995a, b) found that peer work was of primary importance in the development of beginner teachers' meta-learning, the process of understanding their own teaching style. They rarely offered each other advice or questioned each other but rather engaged in
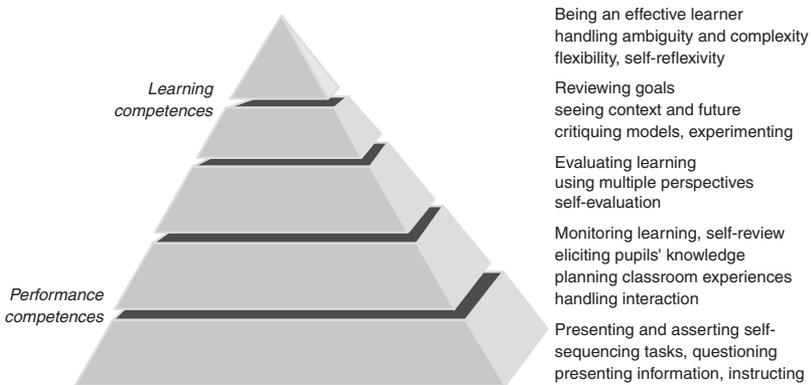

Figure 5.3 A model of teacher competences

parallel, rather disconnected conversations that gave an opportunity for each to clarify and develop their own thoughts about their own teaching. So in a learning-centred community of this sort, one would expect to find:

- an explicit focus on learning, and an explicit model of learning (such as Figure 5.1b);
- practices such as learners generating their own questions;
- learners being asked to make sense (to themselves and to others) of what they meet;
- promotion of dialogue and collaboration;
- reviews of the *learning*, as opposed to performance; and
- a building-up of narrative about learning.

In this fourth model, the focus shifts to the processes of building a community of learners engaged in the generation and evaluation of knowledge. Teachers work with colleagues as 'sounding boards' and co-investigators, and find their own voice (Featherstone *et al*. 1997) Dialogue is supported through structures and cultures, and lies at the heart of learning which is both widespread and deep.

In my own practice as an educator, I have recently experienced situations which parallel those discussed in this chapter, *viz*. peer observation of teaching and appraisal. In both cases the situations have been handled with a primary focus on learning rather than performance, and in a group climate which aims to value exchange. They have each led to very rich dialogue and to the co-construction of high-level personal learning insights. I am confident that they have also contributed to the co-construction of my own enhanced performance.

REFERENCES

Argyle, M. (1967) *The Psychology of Interpersonal Behaviour*, London: Penguin.

Bruner, J. S. (1996) *The Culture of Education,* Cambridge MA: Harvard University Press.

Chi, M. T. H. (1996) 'Constructing self-explanations and scaffolded explanations in tutoring', *Applied Cognitive Psychology* 10: Special Issue, S33–S49.

Chi, M. T. H., de Leeuw, N., Chiu, M.-H. and LaVancher, C. (1994) 'Eliciting self-explanations improves understanding', *Cognitive Science* 18, 439–477.

Csikszentmihalyi, M. (1990) *Flow: the psychology of optimal experience,* New York: Harper and Row.

Dewey, J. (1904) 'The relation of theory to practice in education', in C. McMurray (ed.) *The Third Yearbook of the National Society for the Scientific Study of Education, Part 1,* Chicago: University of Chicago Press.

Doyle, W. (1980) *Classroom Management,* West Lafayette IN: Kappa Delta Pi.

Doyle, W. (1990) 'Classroom knowledge as a foundation for teaching', *Teachers College Record* 91:3, 347–360.

Dweck, C. (1986) 'Motivational processes affecting learning', *American Psychologist* 41:10, 1040–1048.

Dweck, C. and Leggett, E. L. (1988) 'A social-cognitive approach to motivation and personality', *Psychological Review* 95:2, 256–273.

Edwards, A. and Collison, J. (1995) *Mentoring and Developing Practice in Primary Schools*: *supporting student teacher learning in schools*, Buckingham: Open University Press.

Featherstone, D., Munby, H. and Russell, T. (1997) *Finding a Voice while Learning to Teach: others' voices can help you find your own*, London: Falmer.

Ford, D. H. (1987) *Humans as Self-Constructing Living Systems: a developmental perspective on behavior and personality*, Hillsdale, NJ: Lawrence Erlbaum.

Frase, L. E. (1992) 'Constructive feedback on teaching is missing', *Education* 113:2, 176–181.

Freeman, D. (1991) '"To make the tacit explicit": teacher education, emerging discourse, and conceptions of teaching', *Teaching and Teacher Education* 7:5–6, 439–454.

Gray, J., Hopkins, D., Reynolds, D., Wilcox, B., Farrell, S. and Jesson, D. (1999) *Improving Schools: performance and potential,* Buckingham: Open University Press.

Haggarty, L. (1995a) 'The use of content analysis to explore conversations between school teacher mentors and student teachers', *British Educational Research Journal* 21:2, 183–197.

Haggarty, L. (1995b) 'The complexities of effective mentoring in initial teacher education', *Mentoring and Tutoring* 2:3, 32–41.

Hawkey, K. (1995a) 'Peer support and the development of metalearning in school-based initial teacher education', unpublished paper presented at Annual Meeting of the American Educational Research Association, San Francisco.

Hawkey, K. (1995b) 'Learning from peers: the experience of student teachers in school-based teacher education', *Journal of Teacher Education* 46: 3, 175–183.

Hoffman, L. (1993) *Exchanging Voices: a collaborative approach to family therapy*, London: Karnac Books.

James, P. (1997) 'Transformative learning: promoting change across cultural worlds', *Journal of Vocational Education and Training: The Vocational Aspect of Education* 49:2, 197–219.

Kamins, M. L. and Dweck, C. S. (1999) 'Person versus process praise and criticism: implications for contingent self-worth and coping', *Developmental Psychology* 35:3, 835–847.

Kilbourn, B. (1990) *Constructive Feedback: learning the art,* Toronto: Ontario Institute for Studies in Education.

Kruse, S. D., Louis, K. S. and Bryk, A. S. (1995) 'An emerging framework for analyzing school-based professional community', in K. S. Louis, S. D. Kruse and Associates (eds) *Professionalism and Community: perspectives on reforming urban schools,* Thousand Oaks CA: Corwin.

Marton, F. and Booth, S. (1997) *Learning and Awareness,* Mahwah, NJ: Lawrence Erlbaum.

Meyer, R. J. (1995) 'Stories to teach and teaching to story: the use of narrative in learning to teach', *Language Arts* 72:4, 276–278.

Perry, L. (1999) 'There's a garden – somewhere', in A. Morgan (ed.) *Once Upon a Time: narrative therapy with children and their families,* Adelaide: Dulwich Centre Publications.

Rosenholtz, S. J. (1991) *Teachers' Workplace: the social organization of schools,* New York: Teachers College Press.

Sedikides, C. and Skowronski, J. (1995) 'On the sources of self-knowledge – the perceived primacy of self-reflection', *Journal of Social and Clinical Psychology* 14:3, 244–270.

Showers, C. (1992) 'Compartmentalization of positive and negative self-knowledge – keeping bad apples out of the bunch', *Journal of Personality and Social Psychology* 62:6, 1036–1049.

Smiley, P. A. and Dweck, C. S. (1994) 'Individual differences in achievement goals among young children', *Child Development* 65:6, 1723–1743.

Smylie, M. (1989) 'Teachers' views of the effectiveness of sources of learning to teach', *Elementary School Journal* 89:5, 543–558.

Southworth, G. (1995) 'Reflections on mentoring for new school leaders', *Journal of Educational Administration.* 33:5, 17–28.

Streshly, W.A. (1992) 'The feedback loop', *Education* 113:2, 182–186.

Watkins, C. (1992) 'An experiment in mentor training', in M. Wilkin (ed.) *Mentoring in Schools,* London: Kogan Page.

Watkins, C. (1997a) 'Clarifying mentoring goals in their context', in J. Stephenson (ed.) *Mentoring – the New Panacea?,* Dereham: Peter Francis.

Watkins, C. (1997b) *Mentoring Scheme for Black and Ethnic Minority Staff: Evaluation Report at the end of one year of the scheme*, London: Institute of Education/BBC.

Watkins, C. and Mortimore, P. (1999) 'Pedagogy: what do we know?', in P. Mortimore (ed.) *Pedagogy and its Impact on Learning,* London: Paul Chapman/Sage.

Watkins, C. and Whalley, C. (1993) *Mentoring: resources for school-based development,* Harlow: Longman.

Watkins, C. and Whalley, C. (1995) 'Mentoring beginner teachers – issues for schools to anticipate and manage', in T. Kerry and A. S. Mayes (eds) *Issues in Mentoring,* London: Routledge and Open University.

Zeichner, K. M. and Liston, D. P. (1985) 'Varieties of discourse in supervisory conferences', *Teaching and Teacher Education* 1:2, 155–174.