Journal of Educational Enquiry, Vol. 7, No. 2, 2007

Conversations about Effective Teaching

Kevin Pope
Pukekohe Intermediate School,
Pukekohe, New Zealand

Abstract

The expression 'craft knowledge' is not heard very often these days when talking about teaching. A critical evaluation of research into 'best practice' for effective teaching, uncovers a variety of available strategies that apply in a variety of ways. The successful teacher needs to develop a repertoire of appropriate skills to meet the varied demands of classroom teaching. Formal opportunities for in-service training give teachers ongoing access to these important skills but these, on their own, may not readily transform into effective teaching practice in the classroom.

The thesis of this paper is that it is in the context of dialogue amongst colleagues on the job, often spontaneous, that teachers can further develop their 'craft'. The following, imagined, dialogue between a teacher in the early years of teaching and a longer serving colleague, suggests how this might happen.

Prologue

One day at teachers' college, after we had ventured forth into the world of the real live classroom several times on practicum placements in host schools, we were wakened out of a sort of 'resignedness' brought on by another episode in the life of someone called Beeby who seemed to have existed in the last century. One of our number was heard to be saying to the lecturer:

> "It's all very well hearing about this stuff, but we want to find out about is what to do when we are in a classroom"

Yes, well, the ears were open. What would the man say? We wouldn't be surprised by anything much, especially after that lecturer who was supposed to talk to us about aspects of Maori culture. He didn't turn up for the first session, and sent us all away after about an hour of the second 1½ hour session.

"Well, we can't really tell you what to do in a classroom. We can only give you a few ideas to toss around" !

Stunned silence. The lecturer continued, something about the people in the Far North being in awe of experts from the 'big smoke'.

How's your sense of humour?

"How's your sense of humour?" Joe eyed me quizzically as he plonked himself into the vacant chair alongside.

"Fine, why do you ask?"

"I'm feeling a bit tetchy at the moment", he said, "some of the kids are really getting to me today. I thought I was a fairly tolerant sort of a bloke, but I'm starting to lose my patience with some of them. Perhaps it's an end of term thing?"

It was the last week of the first term. Joe had come to us this year as a third year teacher.

"The kids I taught at my last school were quite a lot different to this."

Maybe so. "Joe, the kids will get restless for a number of reasons – even just because it's the end of term! You might like to revise the classroom structures you set up at the beginning of the term and have a think as to whether they are really working for you. If not, you can start over again at the beginning of the next term."

"Do you mean the classroom rules?"

"Well, yes, but the other things as well. You know, keeping lessons running smoothly, students know how they can get help when it's needed, what they can do if they finish the work 'early'. How much time students spend on or off task has a lot to do with how well we organize and manage the classroom as an efficient learning environment" (Brophy & Good 1986).

"As in well prepared lessons with interesting activities do you mean?"

"Yes, but the mundane stuff as well Joe. Keeping time spent getting organized, or dealing with inattention or inappropriate behaviour, to a minimum. Changes between activities need to be managed so that they happen with as little fuss as possible."

"I can see that," said Joe. "Tell me, what do you think about grouping students? I was told at training college that this helps learning, but I'm not so sure."

"There is some evidence to suggest that the more skilled students benefit from skill grouping, Joe (Mosteller, Light, & Sachs 1996) and that the less able students benefit from whole-class grouping – which probably doesn't help too much! I guess it's not surprising that the more able students feel that they learn better when they are in groups with students of similar ability. Their parents certainly are quick to say that their children learn better!

[pause] That reminds me Joe, I've been reading that co-operative group structures work better if group sizes are limited to 2 or 3 students and the task is not something that could be easily done by students individually (Crooks 1988). With small groups, individual group members have separate tasks to do to which contribute to the whole group's effort. Everyone has to contribute."

"OK, I've not thought too much about that. When we were told to put students into groups it was really the social thing that the lecturers were on about. My first school was a primary school. Coming to Intermediate school has been a bit of an eye-opener! The technology teachers have it a bit easy don't they with those half-classes?"

[Grins] "Yeah, they don't think so though! The trade off is the release time we get."

"Guess so. I definitely notice it seems to be a lot easier when a number of students are out of the classroom. The atmosphere of the class seems to change."

"There is some evidence, Joe, that reducing class sizes from about 23 to 15 results in substantial improvement in early learning years (years 1 to 3), particularly in subjects like reading and mathematics, and the effect persists (through years 4 to 7) when students are moved into regular sized classes (Mosteller et al 1996). I've recently come across a study, which compares the effect of reducing class sizes like this to a regular sized class where a teacher aide is employed. By comparison, the same improvements weren't achieved compared with the small class size experiment, nor did the improvements have as much lasting benefit. The prospect of small classes is 'pie in the sky' stuff for us though. The government couldn't afford to implement it. The reality is, Joe, that with class sizes of 25 to 35 students with a wide variety of skills, knowledge, interests and motivations, there just isn't the time to focus on individual learning for more than brief periods (Nuthall 2001). We have to focus on the performance of the class as a whole (Nuthall 2001)."

"That doesn't make me feel so bad! I've been worrying that I can't seem to give the kids the time I would like to. There's so many distractions."

"We're not superhuman! But there are also other pressures that we have to acknowledge are beyond our immediate control. There is always going to be a tension between maximising content coverage and giving the students enough time to practice the new learning (Brophy & Good, 1986). I don't know how you run your classroom, Joe, but we can go too far with giving students autonomy in the classroom. They actually learn more when they spend most of their time being taught or directly supervised by the teacher than they do when working on their own. The teacher carries the content to the students rather than depending on the curriculum materials to do so."

[Bell rings. Joe glances at his watch.] "Time to go I suppose. Only two and a bit more days!"

"Right! Oh, one last thing Joe. If one thing is certain, it's the uncertainty of how things are going to work out! Most of our time each day is spent evaluating what our eyes and ears pick up, trying to make sense of it (Wassermann 1999). Having to think on our feet is the norm [pause] and you were spot on with your reference to my sense of humour. Our sense of humour is a key indicator of how things are going! Catch you later!"

It's a people place

Crunch! Joe bit into a handful of chips, washed them down with a cold ale and sat back in his chair. "Do you think that teaching is largely a matter of relationships and personalities?" he asked.

Joe was looking more relaxed. We were well into the next term, the last holidays it seems had come along at just the right time!

"A lot of people think that (Dunkin & Biddle 1974), Joe. If you think back over the teachers you've had, which ones do you remember most easily?"

"Ah, let's see. There were some who were really keen about their subjects, and had the knack of making the work clear."

"Right. Researchers, you know - the people that have the time to prod around and make sense of what goes on, have turned up some interesting stuff about those teachers that make a real impact. 'Inspired teachers' they call them. They stand out because of their ability to connect learners with a sense of value in what they are doing (Fried 1995). These teachers exercise their professional judgement in determining what learning experiences to give their students, they don't just blindly follow a prescribed programme or preferred philosophy (Duffy 1992)."

"I though that it was a case of being a good communicator."

"That too, but more importantly it's being able to explore and re-interpret the subject matter for the students (Black et al 2001). Have you noticed, Joe, that students tend to talk about school subjects in terms of their teachers?"

"I certainly remember students choosing courses at High School because of the teachers taking them!"

[Grins] "The thing is, Joe, that good teaching can't be reduced to a technique (Palmer 1997). Some would say that it is a holistic thing involving intellectual, emotional and spiritual paths."

"I can see the intellectual side – how we think about things, and also the emotional side – the way we feel; but what's this about the spiritual side? Do you mean we should teach religious studies?"

"Probably wouldn't hurt, Joe! No, what we are talking about here is an aspect of our human nature in which there is a longing to be 'connected' with the 'largeness of life'. Stories of good teaching commonly feature a strong sense of personal identity that permeates the teacher's work and their capacity to establish connections between themselves, their subjects and their students. 'Bad' teachers, conversely, are seen to distance themselves from the subjects they are teaching and, in the process, from their students."

"Can't say that I can get equally enthusiastic about every subject I have to teach! Never mind, I do enjoy teaching my students. As a beginning teacher I had the opportunity to

look in on the classes of some 'successful' teachers, but honestly, I don't think I could do some of the things that I saw them doing!"

"Neither do I, Joe. But that's not a problem. Trained, experienced teachers do differ widely in how they organise the classroom and present instruction (Brophy & Good 1986). They differ with respect to everything from expectations and achievement objectives through selection and design of academic tasks, to how actively they instruct and communicate with students about academic tasks. What constitutes effective instruction varies with context, class or group, subject matter and specific instructional objectives being pursued. [pause] A key factor, Joe, is how well the teachers understand the subject matter themselves (Harlen & James 1996). We cannot provide the experiences and activities that guide students' progress towards understanding of ideas if we don't know ourselves what these ideas are. Grabbing a unit off the internet, for example, on the basis that it 'looks good' is no substitute for designing and resourcing the unit ourselves. We need to have a clear idea of the progression in ideas, skills etc., that are the goals of learning and be able to recognise where in this progression our students are. [pause] Sorry, Joe, this is starting to sound like a lecture!"

"No worries! Do you want another beer? That's better. OK, let's see [pause] Another thing I've been noticing is that although the students do a lot of talking there is a difference between what the more able and the less able students talk about. The more able ones also stick at the work for longer periods of time (Nuthall 2001)."

"That's right, Joe. It seems as though it's to do with how they manage their involvement in classroom activities and this has a lot to do with cultural background – in the widest sense. The psychologists talk about motivation and volition (Corno 1992). Motivation is to do with orientation towards school work and expectations of success, volition is to do with being willing to see things through and not give up. Commitment and persistence if you like."

"That rings a bell, I remember one of the training college lecturers talking about something they called 'self regulated learning'. That's to do with what you're talking about, isn't it?"

"Right, Joe. It's also 'common knowledge' that students' cultural backgrounds make a difference. We don't have too many ideas about why though."

"I remember hearing about a study involving groups of Chinese and Black American students. It seems as though it wasn't a case of different intelligence, but differences in social behaviour. The Chinese socialised and studied together, helped each other out, whereas the Black Americans socialised but went their own way when it came to study (Singham 1998)."

"I'd heard about that too. I think that it goes back to expectation in the home, Joe. Pacific Island students, for example, are a real enigma. Their parents have high expectations for them, but tell them to shut up and listen to the teacher in class because the teacher knows the things they need to know to pass their exams (Jones 1991). Quite the opposite of what needs to happen. As you and I know, students need to take ownership of the work by exploring and discussing it with others to develop their understanding (Nash 2000)."

"Yes, but it doesn't help though when the Pacific Island students come to school and claim that they didn't have time to do their homework."

"I think there's more to it that that, Joe. High achieving students are usually found to have parents that have created emotionally supportive home environments (Finn 1998). They consistently organise and monitor their children's time, help with homework and discuss school matters with their children. On the other side of the coin, children with the poorest developmental patterns – lacking psychological maturity, social competence and self-esteem - are found to be those whose parents are 'disengaged'. By that I mean the parents are authoritarian, fail to provide guidance for their children's use of time, don't help with homework and don't provide support through their children's difficulties."

"Authoritarian? [pause] Heavens, [Joe glances at his watch] you'll have to excuse me I've got to run. I'll be disen-something'd if I don't get home soon! See you around school next Monday."

Teachers teach!

"How are the reports going?"

"Getting there, Joe! What about yourself?"

"Pretty much finished. Some of the kids have done really well in this half year, but I'm disappointed in how quite a lot of them have done?"

"How so?"

"Well, they haven't done badly, but I don't feel that some of them are really working anywhere near their potential."

"Different students do seem to learn different things from the same classroom activities (Nuthall & Alton-Lee 1990)!"

Joe sat down, sipping his coffee. "I spell out for the kids exactly what they need to do to accomplish the tasks I set for them, and give them examples of what the finished product should look like, but it only works for some. I give them quite a lot of positive feedback to try and encourage them."

"Praise can be good, but on it's own has limited value, Joe. More often than not, it is used to say something about task engagement rather than task mastery. In fact, it would really be better reserved for achievements that are substantial (Crooks 1988). Heaps of feedback is a really powerful factor in enhancing student performance (Hattie 1999)."

"Feedback? You mean like making some comments as to what the students could have done after marking an assignment?"

"Yes, but more than that, Joe. Going around the class while they are working and talking with them about what they are doing, where they are up to and what they could try next. The idea is to identify errors in their knowledge and understanding and to give them some assistance with correcting those errors."

"Sounds a bit like 'spoon feeding'!"

"Yes and no. It's not about giving them the answers, but a lot of help about how to work out the answers. The main thing is that as teachers we need to get involved with what the students are doing, and not just leave it all up to them."

"But, is it wise to get too close to the students?"

"No, that's not what I mean, Joe. They're still our students and we are still their teachers. Feedback can be thought of as a form of continuous 'on the spot' assessment. In fact, the educationalists include it in 'Formative Assessment'. The teacher interacts with the student to get feedback about the students present understanding and skill development and follows through by talking to the student and helping them to understand what they need to do to make further progress."

"That has a lot to do with what we talked about before, teachers needing a good understanding of the subject matter themselves!"

"Right! Formative assessment is usually criterion-referenced, but it can also be student-referenced in that it can take into account the effort and circumstances of the student and the progress the student has made over time (Harlen & James 1996). The main thing is that the information is used diagnostically rather than judgmentally with respect to the student."

"One thing I do is to have the students set goals for the term, and then they self-evaluate at the end of the term. I usually get them to set goals based on our diagnostic testing in spelling and maths for example. And a social goal as well. Hopefully, over time, they start to think about the need to set and work towards targets in their other classwork."

"Same here. I've never been sure about the worth of that though. We assume too much about the way kids see things, I don't think they readily transfer the skills they pick up doing that to other areas."

"I've sort of always thought of it being a long-term thing."

"Yes, but at intermediate school, they're only here for two years. What I try to do is to set performance goals for each of the content areas. When I interact with the students, I help them to self-evaluate their progress towards those goals. This puts the focus on the effort needed to accomplish tasks. I then give a 'scaffolded response' to help them to move a bit further on (Black & Wiliam 1998a) [thinks: I must show Joe some examples of scaffolding work at a later time] – I think of it as exploring part of a road map with them. We look to see where we want to go, look to see where we are now and then decide where to go next on the journey."

"Sounds like a lot of work. Then, teachers are supposed to be teachers I guess! Does this feedback approach work for everyone?"

"The researchers tell us that it works especially well with low achievers (Black & Wiliam 1998b). The net effect seems to be to reduce the range of achievement while raising achievement overall. In spite of the successes with this approach there are students whose work just doesn't improve."

"I guess it's that 'you can lead a horse to water but you can't make it drink' syndrome again! If a student doesn't want to work, they won't! I do get worried by how much help is too much (Corno 1992)? In the end is it the teacher or another students that's really done the work?"

"You may be right. [pause] One of the problems is how our school is structured, Joe. With everything carved up into units of work with relatively limited time frames, there just isn't the time available for students to submit work, have it assessed, rework it to increase proficiency then do a different piece of work for grading purposes (Sadler 1989)."

"I know how they feel. I feel pressured by having to 'be seen' to have the students cover the specified content."

"One thing that helps, Joe, is for students to look at what other students are doing. A simple self-assessment exercise to use when students look at other students work could be: 'my work is better, the same, not quite as good as that because … I could improve my work by doing …'. This is one of the reasons why we are getting into the use of multi media to show off what students around the school are doing. Videos shown at assemblies and PowerPoint presentations through the school video network expand the audience for students to show their work off to. Kids love to see what others are doing and we think that they will indirectly pick up more ideas that they can incorporate in their own work."

"I wondered why the school was putting money into that technology!"

"Anyway, the key aspects of formative assessment, Joe, are that if students are provided with feedback about when they are right or wrong, learning is more rapid than if they aren't provided with feedback (Pressley 1995). Immediate feedback seems to be more beneficial than delayed feedback and the quality of the interactive feedback is very important (Black et al 2001). A 'that's good!' isn't good feedback!"

"If interactive feedback is so effective, why bother with tests?"

"Test can be overdone, Joe. I guess we have to have at least one for summative purposes!, but tests also provide a kind of distributed practice. I've read that some studies have shown that taking a test on a topic after studying tends to enhance longer-term retention of the material studied. However, effective teacher questioning can also promote student learning for much the same reason as tests (Crooks 1988)."

The bell rings. "Have you got bus duty tonight?"

"Yes, suppose I better make and effort and rise! [moves over to sink with used coffee cup] Feedback is feedback for us too, Joe. Some say that the art of teaching is to translate complex materials into plain language that can be understood by others (Aoki 2000). If feedback tells us that the students don't understand, then we need to go back to the drawing board! [moves through door …heard in distance] Bother, it's raining … who's got the duty umbrella?"

Fast Food, Or Home Cooking?

"It's a matter of quality not quantity."

"Sorry, what was that Joe?"

"I was at a course recently where the presenter was saying that we should concentrate on the kinds of experiences we give students, not what they are learning (Smith 1995)."

"Sounds like the presenter was on the ball, Joe! [pause] Hang on a sec, I'll just put this down over there … I'm shifting rooms for next year … [assorted noises] have a seat, I could do with a breather!"

"Yes, she reckoned that we should talk less about learning and teaching and more about doing."

"I'd go along with that, Joe. It's a fact that educational standards aren't raised by mandating assessment practices or giving tougher tests (Eisner 1993). In fact 'tests' would be of more value if they paralleled what happens in the real world."

"How do you mean?"

"Well, students should be able to choose an appropriate form of presenting their learning – they could write a poem, a story, make a 3D model, create a multi media presentation for example.'

"But that would take a lot more time, wouldn't it"?

"Yes. You know, it's ironical Joe, but time is to do with standards as well (Smith 2001)! For example, when the 'powers that be' specify that a common goal will be that 85% of all Year 8 students will be meeting the Level 4 Standards for Science by the end of the year, it's pretty impossible for a number of students who could reach those standards if they had more time."

"That's been pretty obvious in my class this year!"

"What should be important is not that the students take on board a prescribed amount of content, but that the students have an opportunity to experience content. Learning of skills and development of knowledge follows from a developing interest in the subject. A major difference between the experience approach and the information and skills approach is that experience isn't measured by tests!"

"That appeals, but [pause … smile forming around lips] didn't you say last time that some testing was useful?"

[Grins] "Yes"

"Standards do come into things though, Joe. A lot of us in the past have tried to create 'error-proof' learning environments by setting minimal standards in the hope of ensuring success for all, and encouraging the weaker students to keep on trying (Clifford 1990)."

"Did that work?"

"No"

"So, what is the alternative?"

"To set challenges instead! Even for the best students, there is a feeling now that for every instructional and evaluation activity there should be a modest percentage, 10%-20%, that poses a challenge. Also the substantive information in a course must be something worth knowing in it's own right – otherwise why bother?"

"If only I could have got my students more motivated! The amount of off-task time has been almost unbelievable! The course presenter also talked a bit about intrinsic motivation and the importance of creating interest in your subject matter 'here and now' (Whitehead 1929). I've always followed the suggestions they gave us at teachers' college and tried to give my students a lot of 'hands-on' work. At times it seems as though it just keeps the kids busy, no real learning happening - you know?"

"Hands-on work, Joe, is often used by teachers who think that their students will find the content boring. One of the dangers is that the activities may only loosely relate to content objectives (Zahorik 1996). In such a case, their usefulness in promoting significant learning is unclear."

"For instance?"

"Well, a number of years ago there was a movement that promoted the use of board games with students with very weak mathematical skills. In their case, the use of these games did seem to help, but then someone said 'Why should the others miss out? All should play these games'. You know, the typical New Zealand egalitarian philosophy – all for one and one for all!'

[With wry smile] "Do you think Alexandre Dumas was a New Zealander?"

[Laughs] "The French did get a leg in to New Zealand, so you never know! Anyway, the problem with this philosophy was, that for most students, this was a waste of time – mathematically speaking. The actual skills that the games promoted were at a very low level and the majority of students had mastered them years before."

"That's what I thought too."

"Another thing, there is a paradox in education, a tension actually, between those who advocate a general education – learn a little about a lot, and those who argue for specialization – learn a lot about a little. While going into a subject in depth is more difficult, it is usually in the material 'below the surface' where the interest is to be found!"

"But we can't be specialists for everything!"

"No, that's right, Joe. But there is another way around it. We can use the so-called 'content topics'. These are content areas that really seem to appeal to students."

"You mean like dinosaurs and volcanoes?"

"Yes, but also things like people and culture, drugs, food, war, fashion, music, safety, map reading, computers … in fact anything to do with 'being human', 'nature, 'functional things' or 'the Now' (Zahorik 1996)."

"The 'Now'?"

"Yes, the things that modern youth think are important. One interesting thing is that the major ideas at the heart of every discipline arose from the real life of a real person (Palmer 2000). There is a viewpoint that good teaching happens when teachers help students to 'connect' with a subject by helping them to see the people behind the ideas."

"I'll file that away for another day! "

"Another significant element in the learning puzzle that research has uncovered is that a student needs to experience the complete set of information needed to full understand a concept at least three times (Nuthall 2001). The time spent in relevant experiences is proportional to the effectiveness of the learning (Nuthall & Alton-Lee 1990)."

"I don't disagree with that, but there is so much content to get through. It's difficult to find the time."

"It's no different to real life, Joe. Think of artists putting on a show, or the yachties in the America's Cup. Before they get to 'performance standard' there is a significant period of rehearsal. It's the time put into 'rehearsing' – repeating and refining things – that is the key to consistency (Pressley 1995) and retention (Ericksen 1985). It's the same for business as well. You know the old adage 'practice makes perfect'! Aiming for higher, consistent, performance standards is what the real world is all about. I think that for us, Joe, it comes back to what we first talked about some time ago – classroom organization."

"But we have to do music, art, other languages …"

"Agreed, but we can manage the amount of time taken to change activities and see that most of the time available for a particular subject is in fact used to do curriculum-related activities (Brophy & Good, 1986)."

Joe shifted in his chair.

"I agree with you, Joe, about the volume of material. Exposing students to too much material is antithetical to what is known about good teaching (Dempster 1993). There is not much point in superficial exposure to large amounts of information [pause, looks towards doorway] Hi, Kim, how can we help?"

Kim trots into the room, Renee in tow. "Mr Reed wants to know if he can borrow the staple-gun."

"Sure, [locates a box and pulls the stapler out] here it is. When will I get it back?"

"Mr Reed didn't say." [Exit, stage left].

Joe returns to his seat after a brief walk around to stretch his legs. "I know I'm going to have to give some thought to altering some of my programmes for next year. It's been good that the school had lots of resourced, ready-made lesson plans that I could use. That took a lot of pressure off me finding my feet, so to speak in the school, this year."

"Yes, I think they're helpful too, even for teachers who have been here a while! But you know, 'sameness' tends to breed mediocrity. When classroom programmes are prescribed for teachers, it is difficult to understand how teachers can be held accountable since the programmes are in charge (Starnes 2000)! In fact there is no convincing evidence that top-down programmes and policies reap positive changes."

"Sounds like a bit of homespun philosophy!"

"Maybe, but not original I can assure you, Joe! Good teaching isn't static. Innovation, a constant, deliberate attempt to improve the quality of learning, is frequently found to be related to improved achievement (Hattie 1999). It is teachers who [pause] TEACH that make the difference.

Joe stands up, and stretches out. "So, in the end, good teaching is a bit like choosing between fast food – easy to get, takes almost no time to have prepared, but is of dubious benefit in large amounts, as opposed to home cooking – needs to be thought about, takes longer to prepare, but unquestionably more nutritious!?"

"Right! Vive la difference! Thanks for stopping by to chat!"

Joe leaves the room. Sounds of a chair being shifted… books falling on the floor.

Epilogue

After some time in schools, and going to a few courses, the term 'craft' cropped up. Apparently someone had researched how teachers got on top of things, became successful. They reckoned it took some seven years for a beginning teacher to learn their 'craft'. It was this craft knowledge it seemed, learned on the job, that made the difference.

I wonder why they couldn't have told us about these things when we were at teachers' college? Come to think of it, there was so much to do sorting out the curriculum, planning for lessons, and getting used to being in front of groups of kids. Maybe that teachers' college lecturer was right? Don't suppose we'd have taken much of this other 'knowledge' in at that time, or understood it for that matter.

Another year has well and truly started. Joe spoke to me the other day. Figured he'd got effective teaching down to a word. Says he now runs an 'OPEN' classroom!

Organised

People aware

Effective feedback

with careful consideration given to the student's

LearNing experiences

Ah well. Joe's a keen young man. Good to be able to have given him a few pointers. Actually, that's something we ought do a bit more of in the staffroom. Talk about what we are doing in our classrooms.

References

Aoki, D. S. (Fall, 2000) The thing never speaks for itself: Lacan and the Pedagogical Politics of Clarity. *Harvard Educational Review*, 70(3), 347.

Black, P., Harrison, C., Lee, C., & Wiliam, D. (2001) Theory and practice in the development of formative assessment. Paper presented at the American Educational Research Association annual conference, Seattle.

Black, P., & Wiliam, D. (1998a) Assessment and classroom learning. *Assessment in Education*, 5, 7-74.

Black, P., & Wiliam, D. (1998b) Inside the black box: raising standards through classroom assessment. *Phi Delta Kappan*, 80, 139-148.

Brophy, J., & Good, T. L. (1986) Teacher behaviour and student achievement. In M. C. Wittrock (Ed.), *Handbook of Research on Teaching* (3rd ed.). New York: Macmillan.

Clifford, M. (1990) Students need challenge, not easy success. *Educational Leadership*, 48, 22-26.

Corno, L. (1992) Encouraging students to take responsibility for learning and performance. *Elementary School Journal*, 93, 69-83.

Crooks, T. J. (1988) The impact of classroom evaluation practices on students. *Review of Educational Research*, 58, 438-481.

Dempster, F. (1993) Exposing our students to less should help them learn more. *Phi Delta Kappan*, 74, 433-437.

Duffy, G. G. (1992) Let's free teachers to be inspired. *Phi Delta Kappan*, 73, 442-447.

Dunkin, M. J., & Biddle, B. J. (1974) A model for classroom teaching (chapter 3), *The Study of Teaching*. New York: Holt, Rinehart and Wilson.

Eisner, E. W. (1993) Reshaping assessment in education: some criteria in search of practice. *Journal of Curriculum Studies*, 25, 219-233.

Ericksen, S. C. (1985) *The Essence of Good Teaching*. San Francisco: Jossey-Bass.

Finn, J. D. (1998) Parental engagement that makes a difference. *Educational Leadership*, 55(8), 20-24.

Fried, R. L. (1995) *The Passionate Teacher*. Boston: Beacon Press. (Chapter 3: Passionate Teaching).

Harlen, W., & James, M. (1996, April) Creating a positive impact of assessment on learning. Paper presented at the American Educational Research Association annual conference, Seattle.

Hattie, J. (1999) Influences on student learning: University of Auckland: Inaugural Professorial Lecture.

Jones, A. (1991) *At School I've Got a Chance. Culture/privilege: pacific islands and pakeha girls at school*. Palmerston North: Dunmore Press.

Mosteller, F., Light, R. J., & Sachs, J. A. (1996) Sustained inquiry in education: lessons from skill grouping and class size. *Harvard Education Review*, 66, 797-829.

Nash, R. (2000) Educational Inequality: The special case of pacific students. *Social Policy of New Zealand* (15), 69-85.

Nuthall, G. (2001) The cultural myths and realities of teaching and learning. Paper presented at the New Zealand Association for Research in Education Conference, Christchurch, 6-9 December.

Nuthall, G., & Alton-Lee, A. (1990) Research on teaching and learning: thirty years of change. *Elementary School Journal*, 90, 547-570.

Palmer, P. J. (Nov/Dec, 1997, Nov/Dec) The courage to teach: exploring the inner landscape of a teacher's life. *Change Magazine*, 29, 14-21.

Palmer, P. J. (Winter, 2000) Good teaching: a matter of living the mystery. *Accounting Education News*, 7.

Pressley, M. (1995) *Advanced Educational Psychology* (pp. 305-323). New York: Harper Collins.

Sadler, D. R. (1989) Formative assessment and the design of instructional systems. *Institutional Science*, 18, 119-144.

Singham, N. (1998) The canary in the mine: the achievement gap between black and white students. *Phi Delta Kappan*, 80, 9-15.

Smith, F. (1995) Let's declare education a disaster and get on with our lives. *Phi Delta Kappan*, 76, 584-590.

Smith, F. (2001) Just a matter of time. *Phi Delta Kappan*, 82, 573-576.

Starnes, B. A. (2000) On dark times, parallel universes, and déjà vu. *Phi Delta Kappan*, 82, 108-114.

Wassermann, S. (Feb, 1999) Shazam! You're a teacher: facing the illusory quest for certainty in classroom practice. *Phi Delta Kappan*, 80(6), 464.

Whitehead, A. N. (1929) *The Aims of Education* (pp. 1-14). New York: Macmillan.

Zahorik, J. A. (1996) Elementary and secondary teachers' reports of how they make learning interesting. *Elementary School Journal*, 96, 551-564.