INVESTIGATING EFFECTIVE FEEDBACK PRACTICES FOR PRE-SERVICE TEACHER EDUCATION STUDENTS ON PRACTICUM.

Abstract

This investigation asked a small group of student-teachers participating in their first pre-service teaching practice in New Zealand to state what they understood by the term feedback, how they expected to be given feedback, what they hoped to gain from the feedback they received, and what they found useful, particularly in relation to influencing their professional teaching practice. The students completed the same questionnaire on four different occasions during their first block of professional teaching practice: after the observing lecturer visit; at a mid-placement meeting with their lecturer; at a one-to-one debriefing session with their lecturer; and after the marking of an assignment related to their professional teaching practice. The findings suggest that specific, spoken feedback was the most consistently given and useful mode of feedback. This aligns with Sadler (1998), Babkie (1998), Graham (1996) and Black and Wiliam (1998) who suggest that clear, concise, positive, focused feedback that meets students' expectations is recommended. The students received a wider variety and range of feedback than they had expected and indicated that it had more than met their expectations and given them clear focus and direction for their future professional teaching practice.

Key Words: feedback, student teachers, teaching practice.

INVESTIGATING EFFECTIVE FEEDBACK PRACTICES FOR PRE-SERVICE TEACHER EDUCATION STUDENTS ON PRACTICUM.

INTRODUCTION

The New Zealand Ministry of Education's *Curriculum Update 47* (2001, p. 6) states that specific, constructive feedback about learning, as it is occurring, is one of the most powerful influences on student achievement in schools. The Ministry stresses that positive constructive feedback that celebrates students' successes helps keep them motivated and increases their confidence. Constructive feedback, moreover, highlights for students the things that are important to focus on and directs their learning towards the next steps (scaffolded learning).

Feedback is expressed in spoken or written form and is, in educational and school terms, variously conceived. Wiliam (1998) argues that feedback is only apparent when the information about the gap in learning is actually used to alter the gap. Sadler (1998) also stresses that feedback must let learners identify gaps between current and desired performance and take some action that will close the gap. He goes further, however, in suggesting that constructing a way forward for learners necessitates feedback that they can readily access and understand and that has catalytic and coaching elements that work to

inspire confidence and hope. Likewise Hattie and Timperlay (2007) found the most powerful form of feedback for learners is that which is regulatory because it involves learners to the greatest degree as participants in their own teaching and learning.

Black, Harrison, Lee, Marshall, and Wiliam (2002) focus on the relationship between teacher and learner. They argue that effective feedback allows for dialogue between student and teacher of a kind that promotes thinking and reflection and evokes and explores understanding. The dialogue must be such that learners have opportunity to think and express their ideas. Hattie's (2003) research on teachers making a difference discovered that feedback from teachers, particularly those considered as expert, was the most powerful single factor that enhances achievement in children in schools.

A recent review of literature analysing the effects of curricula and assessment on pedagogical approaches and educational outcomes prepared for the New Zealand Ministry of Education in 2006 (Carr, McGee, Jones, McKinley, Bell, Barr & Simpson) found gaps in research on pedagogy. One of these (amongst others) was identified as classroom based research which illuminates the importance of teachers providing good feedback to students and thus contributing to teacher training and professional development programmes. Providing student teachers with good models of feedback and effective feedback practices during their

training should only enhance their understanding of this method of formative assessment.

The latest draft New Zealand curriculum for schools released in July 2006, offers a new assessment paradigm where the primary role of assessment is to improve student learning and includes feedback as an essential part of the formative assessment shift. It re-defines the purpose of assessment through quality teaching and learning and provides a national educational challenge from a teacher-centred pedagogy to a learning centred one- a journey which New Zealand teachers have already begun. Student teachers in New Zealand experience these changes through their professional teaching practices and their preservice teacher education programmes.

In 2004, the pre-service teacher education programme for first year primary students at the Christchurch College of Education in New Zealand consisted of a first teaching practice of 3 weeks in the middle of the year. This was an introduction to life in a classroom with the main focus being observations of the children and the associate teacher – both class and school based. The teaching focus was small group instruction with whole class teaching where possible. Students were required to teach a minimum of 3 planned lessons in either English or Maths and were traditionally given feedback on such things as confidence, teacher presence, use of voice, management, questioning, planning and written and oral communication.

This study had several aims in regard to the feedback the students received from the observing lecturer from the College who came to observe their teaching. One was to find out from the Year 1 students what they perceived feedback to be, what sort of feedback they expected to receive from their lecturer during their teaching practice, and what type of feedback (written or spoken) from their lecturer they considered most useful in influencing positive changes to their teaching practice. A second aim was to provide the observing lecturers with information that would inform their giving of feedback to first-year students during and after their first teaching practice.

LITERATURE

The general literature on feedback reveals that quality feedback, whether spoken or written, helps learners confirm the intended outcome of the learning/situation, motivates them to continue and move on, enables them to assess their own learning/performance, and lets them identify their next step (for a summative account, see Black & Wiliam, 1998). Feedback is most effective when it focuses on the tasks and the associated learning, confirms for learners that they are on the right track, includes suggestions that scaffold students to move on, is frequent and given when there is opportunity for the learner to take action, and is in the context of a dialogue about the learning (see, for example, Ministry of Education, 2004).

According to the Ministry of Education (2004), student engagement, interest and learning are particularly enhanced when feedback relates to specific and challenging goals, for the reason that learners are better able to focus, identify their own knowledge and skills and take appropriate action, see and acknowledge gaps in their own learning/performance, and seek appropriate advice and help. This engagement has within it the element of evaluation of and reflection on performance that Graham (1996) considers a vital component of sound feedback for student-teachers. She suggests that student-teachers can better evaluate their teaching performance and become more reflective of the feedback given when their supervisor/observer asks questions like the following *before* giving any other feedback:

- Did you meet your objectives and goals? How do you know?
- If you were to teach this lesson again, what would you change?
- What did you learn about yourself and your students?
- Were your students on task?
- Were your instructions clear?
- What did you see that made you feel good about the lesson? (Graham, 1996, p. 38)

Once the student has reflected on and answered these questions, the supervisor/observer can give his or her perceptions of the lesson with specific comments.

Babkie (1998) also suggests how a co-operating teacher/supervisor (the teacher observing the practice) can work successfully with student-teachers. She maintains that both spoken and written feedback need to be given, and that each should cover positives and negatives. She urges the co-operating teacher to tell students individually what they have or have not done and to offer a list of ways to change behaviour and practices.

Supervisors giving specific feedback to student- teachers can make a difference (Bawdy &Byra, 1995). Specific feedback, containing information relevant to the behaviour of the student-teacher, in contrast to general feedback, which supports the behaviour but provides no information on its 'technical qualities' is an important variable in providing positive changes (Siedentop, 1981) and a collaborative supervision model is deemed more helpful in changing student-teachers behaviours than assessing one's own teaching independently (Mancini, Goss & Frye, 1992; Bawdry & Byra, 1995).

Keeping reflective journals while on teaching practice with guidelines and a suggested framework for moving student teachers into higher levels of cognitive activity, is also an effective way to influence their teaching behaviours (Bain, Mills, Ballantyne & Packer, 2002). Paterson (1995) found from his study that pre service professionals perceived the most effective written feedback on their reflective journal entries to be that which encouraged them to think in more depth about what they had written, to look at issues or incidents in a different way, and to think

about aspects of their learning experiences they had not previously considered. According to Paterson, while supporting and affirming spoken comments were helpful in motivating and reinforcing students' attempts at reflective writing; written comments that challenged, questioned and suggested alternative ways of thinking and doing were most likely to extend students towards higher levels and modes of reflection.

From the literature reviewed, there is some guidance on feedback for pre-service teachers but little on how student-teachers' professional practice is influenced by the spoken and/or written feedback they get from their lecturers/supervisors/co-teachers. This study aimed to cast a little more light on this matter and to get a further perspective from the students themselves about what form of feedback they found most useful in directing the quality of their teaching practice.

METHOD

Sixty-eight students from two of the six first year on-campus

Professional Studies and Professional Practice Course groups were
invited to participate. These students were drawn from a total of 200
students in the 2004 100-level cohort in semester one at the Christchurch
College of Education in New Zealand. The two groups (labelled A and B
for the purposes of the study) were chosen for the sample population
because their lecturers had expressed strong interest in the project and its

possible outcomes. They agreed to assist in the data collection by encouraging their students to participate and by reminding them along the way, both in class and online, to fill out questionnaires. Forms that asked for demographic details and participation consent were collected by these lecturers at the start of the study, as were the completed questionnaires at its end.

The researcher attended the students' first Professional Studies class, where she spoke in general terms about the study and invited the students to participate. She then gave out the consent forms and questionnaires, and asked the students to complete the consent forms and hand them to their lecturer at the end of class if they wished to participate. The consent form asked students to state their gender, age, and ethnicity. The researcher assigned each person a code number and then used this to refer to for anonymity when analysing the data.

The first three questions of the questionnaire asked students to write down a brief description of what they considered feedback to be. The answers given were each coded according to categories and then collated in order of frequency. The questions are listed in the results and discussion section, with the variety of answers and the number of times these responses appeared shown in brackets. Some participants entered more than one answer for each question.

During their first professional teaching practice for the year, the students were asked to fill out the remaining questionnaire on four separate occasions. The questionnaire was designed to take about 10 minutes to complete on each occasion, and each time repeated the same questions, but on different coloured paper for ease of matching with each session. A questionnaire was considered the most useful way of collecting data from the students over time, not only because it allowed the same data to be collected each time but also because it allowed the collection of both quantitative and qualitative data. These specified times were:

- 1. After they had been observed by their lecturer on teaching practice and discussed the lesson discussion with the lecturer (Session 1).
- 2. After they had participated in their mid-placement meeting with their lecturer (Session 2). At this session, the lecturer met with the entire group of students for whom she was responsible. The session involved the group discussing the experiences to date and the lecturer answering student queries and going over teaching practice requirements.
- 3. After they had completed their individual debriefs after teaching practice (Session 3). This session involved the lecturer individually meeting with each of her students to discuss the student's practice and to fill out the summary sheet of their placement, highlighting strengths and areas to work on and setting goals for the next practice.
- 4. After they had received their marked assignment for this part of their training from their lecturer (Session 4). The assignment required the

students to write detailed accounts of a series of observations about aspects of classroom life and a teacher's role in the school. The lecturer marked the assignment against a set of criteria.

The questionnaire required the students to:

- Give an account of the feedback process they experienced with their lecturer during each of the four occasions.
- Indicate with a yes or no to the following questions
 - did the feedback contain spoken or written feedback or both, and to note on a Likert scale how useful they found this feedback (range, "very useful" to "not at all useful")?
 - did the feedback meet their expectations?
 - would they use the feedback to improve their practice and then indicate why they considered this feedback would allow them to do this/not do this?
 - did they consider the feedback to be honest?

The students were urged to answer the questions with honesty and candour.

For the purpose of analysis, answers on the Likert scale were coded from 1 to 5, and the number of yes and no responses tallied. The answers given to the open-ended questions were categorised and collated for each occasion and then totalled across the four different feedback occasions. Percentages were then calculated to indicate the frequency of the various categories of response across the four occasions.

Twenty-nine consent forms were received from Group A and 10 from Group B, making a total of 39 students agreeing to participate in the study. At the end of the teaching practice, nine sets of questionnaires were received from Group A and seven from Group B, making a total of 16 fully completed questionnaires. It was stipulated to the students before the study that only fully completed questionnaires over the four occasions would be accepted.

All of the 16 students who completed the questionnaires were female; the seven males who gave their consent before the teaching practice session did not follow through with the questionnaire. All 16 women were born in New Zealand and all but one identified their cultural group as New Zealand Pakeha/European. This person identified herself as New Zealand Maori. Seven of the 16 fell into the age bracket of 18–20, four in the age bracket 21–25, three in the 26–30 bracket, and two in the 31–35 bracket.

A limitation of this study that should be mentioned here was the small number of students who completed the full questionnaires. It is highly probable that the participants who chose to remain engaged in the research were also those students who had positive experiences on teaching practice and thus could influence the findings.

RESULTS

Students' Understandings of the Term Feedback

Students gave reasonably uniform responses to what they understood feedback to be and what they expected to receive from it (Table 1). Most viewed it as involving advice and tips about their practice and expected to receive it in written format and for it to comprise comment on what they needed to do to improve their practice.

[Take in Table 1 about here]

Table 1 Students' understanding of the term 'feedback' and what they expected to receive from it

Question for	Student Response
students	
Describe what	• constructive criticisms and advice/tips (9)
the term	• how well I have done (3)
'feedback'	• comments about what I have done (3)
means to you.	• a written report telling me how I am going—both positive and negative (3)
	• gaining knowledge about what has happened or being observed (1)
In what way are	written and verbal feedback (9)
you expecting	• pointers/advice/tips on things to improve on (6)
to be given	• feedback on my own achievements and learning periods
feedback during	(4)
this teaching	
practice?	
What do you	• areas to work on (16)
expect to gain	• what I am doing well (7)
from the	• insight into teaching practice methods (1)
feedback that	
you receive	
from your	
lecturer?	

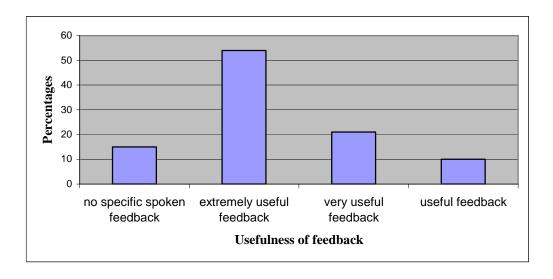
Note: The numbers beside each statement indicate the number of students who gave this response.

Type of Feedback Received During Teaching Practice and Students' Perceptions of It

Across the four sessions, 85% of the students reported receiving specific spoken feedback on a particular behaviour/practice/comment and all considered it useful to varying degrees (see Figure 1).

[Take in Figure 1 about here]

Figure 1 Students' ratings of usefulness of specific spoken feedback received across the four sessions

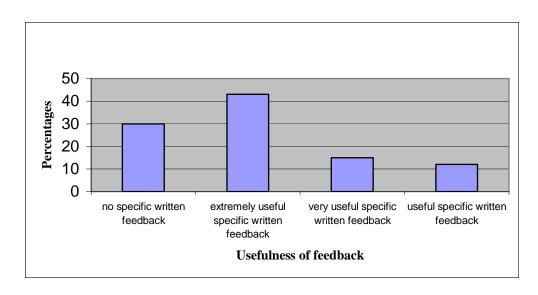


Across the four different occasions, the students identified spoken feedback as being most useful after the observation and during the individual debriefing session.

Seventy percent of the students reported receiving written feedback, with the mid-placement session (Session 2), which involved face-to-face contact with the observing lecturer, expectedly not featuring highly with this form of feedback. As with the written spoken feedback, all students found it useful, with the majority rating it "extremely useful" (Figure 2). Across the four feedback sessions, the students identified written feedback as most useful after the observation (Session 1) and in the individual debriefing session (Session 3).

[Take in Figure 2 about here]

Figure 2 Students' ratings of usefulness of written feedback received across the four sessions



The students indicated that almost all of the feedback they received, both spoken and written, met their expectations (90% of the time) because it was clear and specific, encouraging, positive and informative. It answered their questions, and gave them focus for the future as well as looking at areas they could improve in. Of the four occasions, the students said that the feedback given met their expectations most strongly after the observation and during the individual debriefing session.

Most of the students (88%) said they would make use of the feedback given as they could act upon it because it was detailed and specific to areas of their teaching practice being focused on at the time, such as planning, questioning, and meeting requirements. Eighty percent of the students said they were most likely to feel they could act on the feedback given after the observation visit and the individual debriefing session. All the students (except for one, in relation to the fourth session) rated the feedback received across all four sessions as honest; suggesting the rapport and communication that passed between students and lecturer during these sessions was thoughtful and sincere.

The students' answers to the question of what benefits they thought the feedback would have for their teaching practice revealed the following responses (ordered from most stated to least stated items). A selection of quotes from the students' written comments is added in to illustrate these points.

- Offer tips for future lessons ('I was able to use the feedback straight away on placement, eg/ my use of voice')
- Provide positive comments about specific practices and behaviours
 ('Having the aspects of my teaching I wanted observed and critiqued, I was able to work on certain areas to improve my classroom skills')
- Identify areas to work on and improve in ('I can learn from my mistakes')

- Confirm the student was "on the right track" ('[What I was told] will help me become a better teacher and build my confidence')
- Give positive and helpful direction ('The feedback was positive and supportive')
- Provide focus ('[It] gave me something to work towards')
- Allow students to review and reflect on materials (e.g., readings)
 related to their professional practice and the requirements for it ('It was great having the written material to refer back to')
- Clarify concerns and questions ('The feedback pointed out aspects I
 wasn't aware of, so was encouraging in that way')
- Allow students in the mid-placement group session to see how their performance and experiences compared with those of the other students ("It was good to hear about other peoples placements")

DISCUSSION

Students' Understandings of the Term Feedback

The responses show that the students' most common understandings of feedback were that it would involve constructive criticism and advice/tips on how to improve. The ways in which the students expected to be given feedback during these occasions were written and spoken feedback, advice on things to improve, and feedback statements about how well they had done as well as on areas needing improvement.

The responses are what might be expected from a group of first-year student-teachers experiencing the first teaching practice of their training, as they may not have known what to expect from feedback relating specifically to a teaching practice and could be commenting on experiences of feedback from their own previous schooling and postschooling studies. The students' expectations of feedback align with Babkie (1998), who maintains that both spoken and written feedback need to be given, and that each should cover positives and negatives. Her advice to those monitoring student-teachers' teaching practice also tallies with the students' expectations that the feedback would give them individual advice on what they had or had not done and identify ways to change behaviour and practices. The responses that drew only one or two students probably indicate that these students were unsure of what sort of feedback they would receive on their first professional practice, while the responses given by the majority of students suggest their focus was more on the practice of teaching rather than on the pedagogy or theory behind it.

Type of Feedback Received During Teaching Practice and Students' Perceptions of It

These findings show that, of the two forms of feedback offered, specific, spoken feedback was more frequently given and perceived as more useful. This supports the Ministry of Education's (2004) description of quality feedback as comprising "conversations" that help learners

become motivated, assess their own performance, identify how to improve and confirm they are on the right track. It also supports the Ministry's contention that feedback should be given to learners when there is an opportunity for them to take action—be it in the next lesson or the next practice in this instance. The students' perceptions of the adequacy of the quantity and quality of verbal feedback given to them, especially after the observation visit and in the individual debriefing session, are congruent with Graham's (1996) suggestion that specific spoken questions should help student-teachers evaluate their own performance and become more reflective. The results also align with Babkie (1998) and her suggestions on how to use spoken and written feedback successfully with student-teachers. Her recommendations in this regard include talking with students about what they have done, both positive and negative, and providing them with written action plans focused on improving specific areas of practice.

The aspects of the feedback the students received comply with Sadler's (1998) advice that feedback must be understood by learners, inspire confidence and hope, and enable them to identify gaps between current and desired performance and then take action to close that gap.

Siedentop's (1981) call for specific feedback that contains information relevant to the behaviour and provides information about its technical qualities is also apparent in these results. The students' responses also reveal that the actual feedback they received was more in-depth and

varied than they had expected to receive as indicated by their responses to questions about feedback prior to beginning their teaching practice.

The nature of the students' responses to the benefits of the feedback they were given accords with the Ministry of Education's (2001) comments that specific, constructive feedback about learning as it is occurring is essential, and that the person giving the feedback should couch it in terms of celebrating successes, highlighting areas needing improvement or gaps in knowledge, and scaffolding students' learning. They also reflect Brawdy and Byra's (1995) findings that a model of feedback that emphasises a spirit of collaboration between pre-service teachers and their supervisors and focuses on giving comments specific to behaviours and practices observed is more effective in enhancing pre-service teachers' teaching practice than a model in which students self-evaluate their practice.

While spoken feedback was the mode that students rated more highly, some did rate the written feedback as extremely useful, supporting Bain et al. (2002) findings that written comments that challenge, question and suggest alternative ways of thinking and doing appear to be the type of written feedback most likely to extend students. The few students who indicated the feedback was not particularly useful or positive could have experienced feedback that was not specific enough and that did not contain the characteristics of good feedback identified in the literature.

Despite lecturers urging students to fill out the questionnaire on each of the four occasions, it appears (based on the lecturers' comments to the researcher) that some students lost interest over the time period of six weeks that elapsed from when the study was first introduced to them and they began their four-week teaching practice sessions. In all, student interest and motivation needed to be maintained over a 10-week period, which may have been an unrealistic expectation of them. Another suggested explanation was that because the students were experiencing their very first teaching practice, many of them may have been unsure as to how much work would be involved in the practice and did not want to commit to extra responsibilities. A third reason why some students did not continue was that, with no previous experiences of being given feedback during teaching practice, they may have found it difficult to answer whether the feedback had met their expectations or would improve their practice.

These considerations indicate that collecting information from the students through face-to-face interviews may have made providing answers easier for them and helped retain their interest in the study.

Despite the disappointing questionnaire return rate, the students who filled out the four questionnaires received, as a group, feedback from 12 different professional practice lecturers, which gave a breadth of experiences in regard to the feedback received.

CONCLUSIONS AND RECOMMENDATIONS

The results of this study of 16 Year 1 Bachelor of Teaching and Learning students on their first teaching practice show that spoken feedback was the most common and frequent form of feedback given and was the form deemed most useful by the students in terms of their professional practice. However, written feedback was also widely received and also seen as useful by the majority of the students. A reminder at this point that this group of students had only completed one semester of a 3 year degree and their perceptions of effective feedback were based on a limited theoretical background.

The feedback, whether spoken or written, that students seemed to value most was that directed at specific teaching behaviours and practices.

These findings indicate that both spoken feedback and written feedback for this group of first year student teachers on their first teaching practice, are effective models of feedback, especially if the feedback is specific in its focus and comprises a mixture of written and spoken.

Lecturers observing student-teachers' professional practice could be advised to bring in more spoken commentary when giving feedback, especially in one-to-one situations, which was one of the two occasions students found feedback to be most valuable. This is often difficult in group lecture situations, but could be made mandatory when visiting students on teaching practice.

The students' responses about the feedback they received from their lecturers indicated that, overall, the feedback showed the elements of good practice identified in the literature by Sadler (1998), Babkie (1998) and Black and Wiliam (1998), in that it was clear, concise, positive, focused and met their expectations of it. The series of questions that Graham (1996) recommends supervisors should ask student teachers could form a framework for the lecturers at the College of Education in their feedback practices. Students considered the most valuable feedback they received across the four occasions (in terms of meeting expectations and being able to make use of the feedback) were after the observation on teaching practice and at the individual debriefing session. This suggests that lecturers at the College of Education may need to give additional thought to how to make the feedback given at the midplacement session and the marking of the assignment more useful and effective for the students.

A weakness of the study, however, in addition to the small number of students who participated, is that these students had nothing against which to rate the process of feedback during teaching practice, as this was their first experience of a teaching practice. This meant that their perceptions of feedback would have depended on the varied personal previous educational contexts within which they had received some form of feedback. It would also have been beneficial to interview the other initial participants (15 females and seven males) who filled out the consent forms on the first day, but failed to carry on with the

questionnaires, to discover why they chose to discontinue. Whether this was for the reasons offered earlier or had something (possibly negative) to do with the feedback process itself could then be determined.

There is no doubt that the feedback process for this group of students was, in the main, positive and that they considered it would positively influence their teaching practice in the future—a good confirmation for the staff involved. The findings indicate that a mixture of both written and spoken feedback is likely to be most effective for Year 1 student-teachers in relation to their teaching practice and that one-to-one specific feedback with the lecturer involved is certainly desirable. The information gained will assist the moderation that takes place both internally and externally in the College of Education.

References

- Babkie, A. M. (1998). Work successfully with a student teacher. *Intervention in School and Clinic*, 34(2), 115–118.
- Bain, J. D., Mills, C., Ballantyne, R., & Packer, J. (2002). Developing reflection on practice through journal writing: Impacts of variations in the focus and level of feedback. *Teachers and Training: Theory and Practice*, 8(2), 171–196.
- Black P., Harrison C., Lee, C., Marshall B., & Wiliam D. (2002).

 Working inside the black box: Assessment for learning in the classroom. London: King's College.

- Black, P., & Wiliam, D. (1998). *Inside the black box: Raising standards*through classroom assessment. London: Kings College School of Education.
- Brawdy, P., & Byra, M. (1995). Supervision of preservice teachers during an early field teaching experience. *Physical Education*, 52(3), 147–160.
- Carr, M., McGee, C., Jones, A., McKinley, E., Bell, B., Barr, H. & Simpson, T. (2006). The Effects of Curricula and Assessment on Pedagogical Approaches and on Educational Outcomes. *A paper prepared for the New Zealand Ministry of Education under contract with the University of Waikato*. Retrieved from the World Wide Web April 29th 2007. www.mineduc.govt.nz
- Graham, M. (1996). Guiding tomorrow's teachers. *Learning*, 26(5), 37–38.
- Hattie, J. (2003). Teaches Making a Difference: What is the Research Evidence? Australian Council for Educational Research Annual Conference. Building Teacher Quality. October 2003.
- Hattie, J. & Timperlay, H. (2007). The Power of Feedback. *Review of Educational Research*. 77,(1) 81-112.
- Mancici, V. H., Goss, J., & Frye, P. (1992). Relationships of interaction behaviour patterns of student teachers and their co-operating teachers. *Abstracts of Research Papers: AAPHERD Conference*
- Ministry of Education. (2001). *Curriculum update 47*. Wellington: Learning Media.

- Ministry of Education. (2004). *Curriculum update 54*. Wellington: Learning Media.
- Ministry of Education (2006) The New Zealand Curriculum. Draft for consultation 2006. Wellington: Learning Media
- Paterson, B.L. (1995). Developing and maintaining reflection in critical journals. *Nurse Education Today*, *15*, 211 –220.
- Sadler, R. (1998). Formative assessment: Revisiting the territory.

 *Assessment in Education: Principles, Policy and Practice, 5(1), 77–84.
- Seidentop, D. (1981). The Ohio State University Supervision Research

 Programme summary report. *Journal of Teaching in Physical Education*, 1(1), 30–38.
- Wiliam, D. (1998). Enculturating learners into communities of practice:

 Raising achievement through classroom assessment. London:

 King's College.